

1954

Annual Report of the Nebraska Game, Forestation and Parks Commission 1954

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ANNUAL REPORT
Of The
NEBRASKA GAME, FORESTATION AND PARKS COMMISSION

1954

Introduction

This report is prepared for two primary purposes:

1. To permanently record the activities of the Nebraska Game, Forestation and Parks Commission.
2. To provide all interested groups and individuals with a factual analysis of the accomplishments of the Commission in its many fields of endeavor.

Many questions arise in the minds of hunters and fishermen in the State, and all too often false answers are conjured up from sources not familiar with the facts. The correct answers to most such questions will be forthcoming from the investment of a little time in the study of this report.

Commission Reorganization Plan

At the close of 1953 a new reorganization plan was approved by the Commission and officially placed in operation in September of 1954.

Previous to this time most of the investigational work was carried on from Lincoln, making contacts with remote areas of the State infrequent.

The reorganization plan was approved in order to accomplish the following:

1. A means of providing the Commission and its administrative personnel with a trained field force actually living and working in the local areas of the State, establishing a more direct contact with the people, the game and fish, and the local related problems.
2. A means of providing a more localized group of trained men in each division of the Commission's activity available to the local residents of the area for contacts on their related problems and to provide assistance from men better acquainted with their local problems. It is also a means of providing all areas of the State with a more equitable source of department public relation material and personnel for meetings, etc.

3. An additional means of providing appropriate personnel to transpose factual investigational information acquired into practical application aimed at bettering game and fish conditions.
4. A means of enabling the department to better understand "what is happening," and "what may happen," instead of only "what has happened."

This reorganization plan accomplishes the above by:

1. Decentralization of department forces.
2. Reduction of fixed overhead.
3. Decrease in seasonal specialized crews.
4. Decrease in permanent unskilled labor.
5. Increase in skilled, trained personnel.
6. Formation of multiple use crews.
7. Increased contractual services.
8. Increased use of Federal funds.

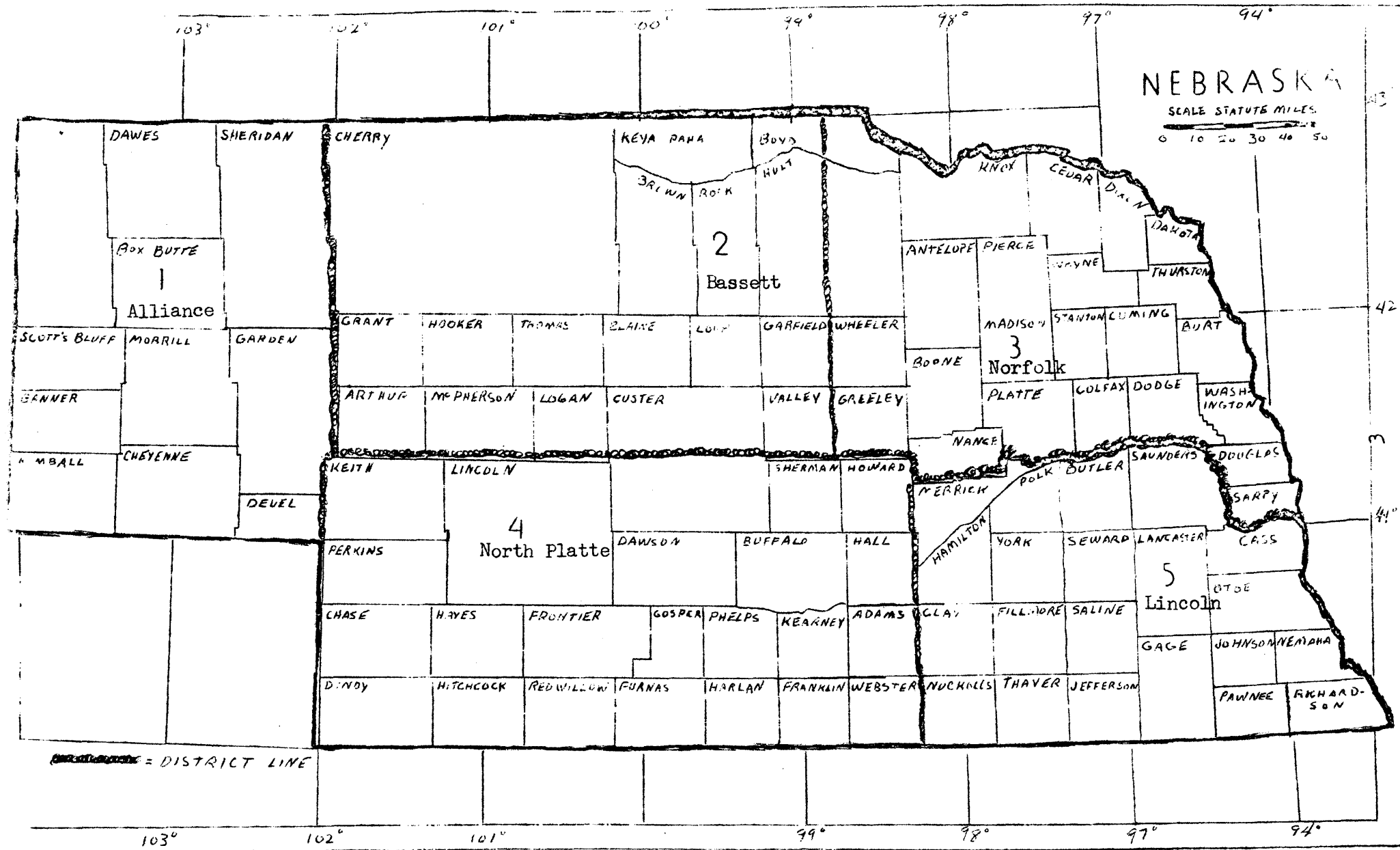
The mechanics and personnel of the district plan calls for five districts with headquarters located at Lincoln, North Platte, Alliance, Bassett, and Norfolk. (See district map on next page.)

Assigned permanently at each district headquarters are:

1. A district Conservation Officer Chief in charge of law enforcement officers in the district.
2. A Game Manager in charge of all game problems except the Game Farm.
3. A Fisheries Manager in charge of all fish problems except the fish hatcheries and seining crew.
4. A Land Manager to work directly with the farmers and rural groups in the establishment of cooperative farm practices beneficial to wildlife, particularly habitat improvement.
5. An Operations Manager and crew to assist with habitat planting in the spring, recreation ground maintenance and general department construction the remainder of the year, and limited seining when necessary.

This plan of operation has only been in effect a few months and already a new level of efficiency has been reached. Organized groups and individuals are encouraged to contact their local district men on their needs or problems.

The present general organizational plan of the Commission's personnel is as follows:



Commission

Executive Secretary

Supervisor of Construction

Five District Operation Managers and personnel
Supply Depot Superintendent

Supervisor of Fisheries

Four Superintendents of fish hatcheries and personnel
Superintendent of seining personnel
Five District Fisheries Managers

Supervisor of Game

Project Leader
Five District Game Managers
Game Farm Superintendent and personnel
State Trapper
Two special pheasant biologists

Supervisor of Information

Artist, Exhibitor
Circulation personnel

Supervisor of Land Management

Project Leader
Five District Land Managers
Six Park Superintendents and personnel
Reservoir Manager and personnel

Supervisor of Law Enforcement

Five District Chiefs and their area officers

Legal Counsel

A full description of these various divisions of the Game, Forestation and Parks Commission follows, and a list of the names and addresses of all personnel is included at the close of this report.

COMMISSION

The Nebraska Game, Forestation and Parks Commissioners comprise the official body responsible by law for over-all administration and general policy, including planning and checking of projects and activity records of all divisions and the employment of all personnel in the advanced classifications.

The Commission is composed of seven members appointed by the Governor for a five-year term; the terms being so staggered that no more than two new Commissioners are appointed in any one year. No more than four Commissioners may be of the same political party and no Commissioner may succeed himself by immediate reappointment. Commissioners receive no

salary for their services, other than reimbursement for actual expenses and per diem, when attending meetings. All official meetings are held in the Commission offices on the ninth floor of the State Capitol Building at Lincoln. During the year 1954, the Commission held seven official meetings and several inspections.

OFFICE

The office of the Commission, considered as a physical unit, provides working accommodations for all supervisors and their secretaries, as well as the Executive Secretary and all accounting and bookkeeping personnel. The office as a budgetary unit, however, includes only the Executive Secretary, seven bookkeepers, one secretary and one Legal Counsel.

The Executive Secretary is the administrative head of the organization, placing in operation the Commission projects and orders and reporting back the activities and progress in all divisions. The Executive Secretary is appointed by the members of the Commission for a term of six years. In addition to the administration of the Department in accord with Commission policy, the Executive Secretary presented fifty-two radio programs, six television programs and sixty-one speeches.

The office division is responsible for the following activities:

1. Setting up of permit sale accounts over the State. At the present there are 1070 accounts.

2. Collection and depositing with the State Treasurer all income. In 1954 \$1,039,213.75 was collected from all income sources, excepting Legislative Park Appropriations and cash collected from parks, which totaled \$136,876.95, making an over-all total of \$1,195,211.26.

3. Payment of all vouchers for all divisions. In 1954, \$1,090,184.18 was paid out, including State Parks.

Appropriate records are maintained in all transactions and all records of the Commission's individual divisions are audited each year by the office of the State Auditor, and when such transactions involve Federal aid funds, by the auditors of the Fish and Wildlife Service.

ANNUAL REPORT

CONSTRUCTION AND ENGINEERING DIVISION

Eugene H. Baker, Supervisor
Construction and Engineering

For the Year Ending
December 31, 1954

This report for the year of 1954 will be divided into two parts; one covering activities under the old plan of operation and the other covering activities subsequent to the reorganization and installation of district offices September 1, 1954.

Part A - January 1, 1954 to August 31, 1954

This division at that time consisted of a supervisor, one secretary and an allotted quota of 16 crew members. Division was composed of a supervisor, survey crew, construction crew and supply depot personnel and activities consisted of the following:

1. Requisitioning of all materials, supplies and equipment.
2. Stocking, storage and shipping of all materials requisitioned from the supply depot.
3. Maintenance of a perpetual inventory at the supply depot.
4. Compilation of Department inventory.
5. Responsible for the making of preliminary surveys of proposed new impoundments.
6. Responsible for the preparation of plans, specifications and construction of all new projects.
7. Responsible for the preparation of plans and specifications for all projects requested by other divisions.
8. Responsible for fulfillment of approved plans by use of Commission personnel or by the letting of contracts as determined by the Commission.
9. Legal disposal of surplus and depreciated material and equipment.
10. Construction and maintenance in all other divisions when properly requested and approved.
11. Correspondence pertinent to detailed administrative or technical information.
12. Public relations pertinent to this division.

Activities of the Construction Crew

Alexandria Recreation Grounds - Located 4 miles east of Alexandria

Due to excessive travel over the fill of the new lake constructed in 1953, it was necessary to raise this fill approximately 15 inches. This excessive travel was due to county road condition adjacent to the lake; however, Jefferson County has now repaired the road and it is no longer necessary for them to use recreation roads as they have in the past. All roads within the area were graveled and the backslope was seeded with a combination of brome and switchgrass, in order to eliminate run-off erosion. The new lake, No. 3, and Lake No. 2 were connected by use of corrugated metal pipe. This will provide additional spring water for Lake No. 2 and will assist in the elimination of possible stagnant areas.

Expenditures:

Labor, Board & Lodging	\$ 450.56
Materials & Other	1087.19

Total -	\$1537.75
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Benkelman Fish Hatchery - Located 1 $\frac{1}{4}$ miles northeast of Benkelman (This includes Rock Creek Hatchery located 18 miles northwest of Benkelman which is operated under the same supervision.)

Due to siltation and vegetation growing within the ponds, it is necessary that each of these ponds be cleaned out every eight or ten years. For the past three years, we have endeavored to remove this silt and vegetation in at least two of the ponds. Excess dirt is used to rebuild the dikes and adjacent roadways. This year we were able to obtain an unlimited quantity of balast rock from the abandoned railbed near Trenton. This was hauled to both Benkelman and Rock Creek and used as riprapping the face of the dikes to eliminate wave action erosion.

Expenditures:

Labor, Board & Lodging	\$1700.16
Materials & Other	3340.88

Total -	\$5041.04
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Bowman Lake - Located 2 miles west of Loup City

The behavior of the Loup River, especially during the period that ice is breaking up, continually confronts us with a problem of undercutting at the headgate. This headgate is a concrete structure poured in the middle 1930's and is used for diversion of water from the Loup River through a canal to Bowman Lake. This year erosion and undercutting were more excessive than usual and to avoid loss of the headgate, a steel piling wall was driven, paralleling the inlet.

Expenditures:

Labor, Board & Lodging	\$1000.10
Materials & Other	2007.16

Total -	\$3007.26
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Medicine Creek Reservoir - Located 10 miles west of Cambridge

Work in this area consisted of surfacing of access roads and riprapping of limited areas with balast rock hauled from the abandoned railbed near Trenton.

Expenditures:

Labor, Board & Lodging	\$114.40
Materials & Other	116.32

Total -	\$230.72
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Gretna Fish Hatchery - Located 5 miles northwest of Louisville

As rock is continually needed at the hatchery for riprapping retaining wall construction, etc., the old quarry was opened up during the month of January and a stockpile of rock was quarried out for future use.

Expenditures:

Labor, Board & Lodging	\$2242.24
Materials & Other	2198.04

Total -	\$4440.28
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Grove Lake - Located $3\frac{1}{2}$ miles northeast of Royal

This consisted of the continuation and completion of construction of the new lake started in 1953. This is a tract of land totaling 426 acres purchased by the Commission January, 1952. The dam, an earth fill,

Grove Lake (Continued)

was constructed across the Verdigre Creek impounding a lake of 67 surface acres with a maximum depth of 28 feet. Verdigre Creek is a constant flowing creek with a normal flow of 44 second feet. The fill is compacted earth, the face completely rock riprap. Verdigre Creek flowing into the lake is diverted through the fill by use of a concrete chute. The entire area has been fenced and construction of picnic grounds, parking area and access roads have been completed. This is a Federal Aid project, of which 75% of the total cost of construction is reimbursed by Pittman-Robertson funds. Expenditures which include contracting engineer, land acquisition, construction contract, picnic grounds, parking areas, access roads, fencing, etc.

Total - \$164,745.99

Hayes Center Recreation Grounds - Located 12 miles northeast of Hayes Center

Face of this dam was completely reconstructed. Compacted earth has been added, leaving a slope of 4 - 1. The slope was then riprapped with balast rock hauled from the Trenton abandoned railbed. Wave breakers were constructed and easement secured permitting the raising of water level an additional two feet.

Expenditures:

Labor, Board & Lodging	\$ 858.88
Materials & Other	1218.50

Total - \$2077.38

Memphis Recreation Grounds - Located $\frac{1}{2}$ mile northwest of Memphis

Wave breakers were constructed and installed to eliminate excessive erosion of the fill by wave action.

Expenditures:

Labor, Board & Lodging	\$ 480.35
Materials & Other	400.55

Total - \$ 880.90

Memphis Duck Marsh - Located 1 mile northwest of Memphis

This duck marsh is a continuation of Memphis Lake; however, is reported separately as it is a new purchase and all purchase and construction were reimbursed 75% from Federal Pittman-Robertson funds. This land acquisition was made in 1953; however, the continuation of the

Memphis Duck Marsh (Continued)

project was completed in 1954. This consisted of level ditching of 8000 feet of ditch, averaging 16 feet wide and 4 feet deep to provide necessary water for ducks and encourage their nesting in this area. This entire area has been flooded by raising of the water level in Memphis Lake. In addition to being a duck nesting area, it is also a public shooting area.

Expenditures:

Labor, Board & Lodging	\$1766.56
Materials & Other	2100.55

Total -	\$3867.11
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Norfolk Game Farm - Located 6 miles south of Norfolk

Severe ice damage during the winter of 53-54 collapsed nearly all the pheasant rearing pens. All of these pens were completely rebuilt and all wire restretched and additional supports added.

Expenditures:

Labor, Board & Lodging	\$1386.74
Materials & Other	277.17

Total -	\$1663.91
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Otter Creek - Located 11 miles southeast of Lewellen

Improvement of picnic area and camping grounds was made, also fill of an old drainage canal which had bisected the area. This has been filled, leveled and seeded providing better access to both areas.

Expenditures:

Labor, Board & Lodging	\$154.88
Materials & Other	210.00

Total -	\$364.88
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Pressey Recreation Grounds - Located 5 miles northeast of Oconto

A very bad traffic hazard in access to recreation grounds was eliminated by construction of a new approach to state highway. The road leading to the recreation ground was regraded and gravel surfaced.

Pressey Recreation Grounds (Continued)

Parking area near shelter was provided and gravel surfaced. Drainage tubes installed for diversion of run-off waters.

Expenditures:

Labor, Board & Lodging	\$ 397.20
Materials & Other	983.07
Total -	<u>\$1380.27</u>

Sacramento Game Farm - Located 2 miles west and $\frac{1}{2}$ mile north of Wilcox:

Developments and improvements in this area include the construction of a pheasant rearing pen of approximately 9 acres. This pen was enclosed with 1" and 2" mesh woven wire, height of 8 feet and divided into two parts. Electric service line was run to fence charger, energizing a wire around the perimeter for rodent protection. The residence was modernized by installation of bathroom water heater, electric pump and pressure tank. Water service lines were extended to the pheasant pen. Septic tank and disposal field are included in the residence modernization.

Expenditures:

Labor, Board & Lodging	\$1779.90
Materials & Other	3236.09
Total -	<u>\$5015.99</u>

Smith Lake - Approximately 19 miles south of Rushville

In the past, fishermen traffic had been using private road for access to a portion of the lake; however, due to difficulty encountered with the ranch owner, it was necessary that we construct a road on state property in order to prevent this interference with the grazing practices of his livestock. Approximately one-eighth of a mile of road was constructed across a marshy area and an equalization tube installed in order to provide water for the rancher's cattle. This new road was gravel surfaced and a turn-around area near the dam was constructed and also gravel surfaced. Assistance in this construction was given us by Sheridan County Commissioners.

Expenditures:

Labor, Board & Lodging	\$1164.24
Materials & Other	1717.07
Total -	<u>\$2881.31</u>

Valentine Fish Hatchery - Located $2\frac{1}{2}$ miles northeast of Valentine

A new water supply line was laid between the reservoir pond and rearing pond. Disposal fields were laid from existing septic tanks, eliminating wastes entering rearing ponds.

Expenditures:	
Labor, Board & Lodging	\$ 964.48
Materials & Other	1548.55
	<hr/>
Total -	\$2513.03

Willow Lake - Approximately 25 miles south of Valentine

The final phase as outlined in our stipulation for the removal of Willow Lake was accomplished. This included the removal and salvage of outlet tube and gate and cutting of the dike, preventing any future impoundment.

Expenditures:	
Labor, Board & Lodging	\$168.96
Materials & Other	459.29
	<hr/>
Total -	\$628.25

Chadron State Park - Located 10 miles south of Chadron

The following work was carried on under the supervision of the engineering division; however, this will be supplemented by work and accomplishments under supervision of the Land Management Supervisor. In order to provide better electric service, eliminate maintenance costs, eliminate fire hazard, and above all, eliminate danger to park visitors, all secondary service wire previously run overhead has been removed and run underground. All cabins and buildings were rewired to conform with National Electric Code local and state laws. In pursuance of the over-all plan for construction of cabins, two new cabins were constructed this year. Six cabins are in the process of being re-modeled. Remodeling consists of running of concrete footings, running concrete floor, laying of asphalt tile, installation of partitions in dividing rooms and installation of bath, kitchen, dining and bathroom facilities and equipment. The following total of expenditures includes electric wiring, construction of new cabins and the portion of modernization that has been completed as of December 31, 1954.

Expenditures:	
Labor, Board & Lodging	\$ 3310.78
Materials & Other	16586.08
	<hr/>
Total -	\$19896.86

Niobrara State Park - Located 1 mile west of Niobrara

In pursuance of the over-all plan for construction of cabins, two new cabins were constructed this year. This included the laying of underground electric line to the new cabins, piping of water and installation of septic tank and disposal system. In anticipation of winter use due to Gavins Point activities, these two cabins were insulated. Other work included grading of park roads, graveling, cleaning out of inlet pipe between Niobrara River and park lagoon and excavation of channel between river and inlet box.

Expenditures:

Labor, Board & Lodging	\$ 4116.07
Materials & Other	7279.36

Total -	\$11395.43
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Victoria Springs State Park - Located 10 miles northwest of Merna

In pursuance of the over-all plan for park development, two new cabins were constructed in this park. Also in order to improve the electrical system and provide lighting in the picnicking area, underground electric service line was run and primary line rerouted. Lights were installed in the picnicking area and underground line run to the two new cabins. It was also necessary to drill a well and install pump for water supply to the new cabins and for irrigation water, as well as supplemental water for the lake. Water was piped into the two new cabins and septic tank with disposal field installed.

Expenditures:

Labor, Board & Lodging	\$ 1349.92
Materials & Other	8670.73

Total -	\$10020.65
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Engineering

Engineering supplied by the Commission during the year included all plans and specifications and supervision for all work performed and proposed by the Commission, with the exception of completion of Grove Lake. This consisted of construction of new cabins, drilling of wells, installation of septic tanks, rewiring state parks, regrading and resurfacing of roads, concrete structures, dikes, drainage structures, building remodeling, field survey of various towns and building sites for proposed new district offices, plan and supervision of remodeling of new district offices, preparation of material estimates in writing specifications, processing of all requisitions for purchases made by Commission, preparation of application for Federal funds for all new or proposed constructions and cost estimates and feasibility studies for possible or proposed lakesites.

Holding Plant - Lincoln

This is a general service account which provides a building for office space, warehouse for all stock, materials, storage buildings for each division's seasonal equipment, yard for storage of bulk items and equipment, heating and lighting of buildings, shipment and receiving of materials, mail service, construction of general service items, etc. A portion of this office space is reimbursed to us by Pittman-Robertson for use of their staff and laboratory. In addition to this, Education and Information Division and Operation Manager are officed in this building.

Operation Costs:

Labor, Board & Lodging	\$4232.17
Materials & Other	2148.76

Total -	\$6380.93
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Revolving Fund

This account is set up for the bulk purchase of commonly used materials required by all divisions of the Game Commission. Items are purchased and stored at our Holding Plant for three primary purposes, (1) in order to take advantage of the savings made on the bulk purchases, (2) for convenience and expediency in getting required materials to the job, and (3) to eliminate the processing of all the documents required to make small purchases. If it were not for this stock, there would be numerous cases where the cost of preparation of documents would exceed the cost of materials purchased. This is a Revolving Fund which is reimbursed for actual price paid for each item of material delivered to other accounts. Expenditures for stocking, shipping, etc. are charged against the General Service account mentioned above.

Purchased -	\$17036.26
Transferred -	14020.25
Sold to State Parks -	1351.28

Part B - September 1, 1954 to December 31, 1954

As referred to in Part A of this report, subsequent to September 1, the new reorganization plan was in effect dividing the state into five separate districts. This plan has not only been more economical in operation, but has proven to provide more and better information to our sportsmen and general improvement of efficiency of the entire organization.

What has been previously known as the construction crew is now known as the operation crew. This consists of five crews, from four to seven men on each crew. This is a consolidation of the old construction crew, maintenance crew and tree planting crew. Their duties vary with the seasons. During the spring planting season, this crew will carry out the activities of the former tree planting crew in planting of all wildlife areas, which are not planted by contract and distribution of fencing materials. As soon as these activities have been completed, they will go on to their regular recreation ground summer maintenance. In the latter part of the summer, they will do minor fish salvage jobs and distribute salvaged fish to designated lakes. During the fall, the majority of their work will be in fish salvage and distribution and checking of wildlife areas in preparation for ordering of replanting stock. During the winter, they will take care of all tree trimming and other major work as scheduled. In addition to the aforementioned duties, they will assist the biologist in his lake and wildlife studies and assist with checking stations during deer season. State office personnel was not increased. Activities of this division consist of the following:

1. Requisitioning of all materials, supplies and equipment.
2. Stocking, storage and shipping of all materials requisitioned from the supply depot.
3. Maintenance of a perpetual inventory at the supply depot.
4. Compilation of Department inventory.
5. Responsible for the making of preliminary surveys of proposed new impoundments.
6. Responsible for the preparation of plans, specifications and construction of all new projects.
7. Responsible for the preparation of plans and specifications for all projects requested by other divisions.

8. Responsible for fulfillment of approved plans by use of Commission personnel or by the letting of contracts as determined by the Commission.
9. Legal disposal of surplus and depreciated material and equipment.
10. Construction and maintenance in all other divisions when properly requested and approved.
11. Construction, maintenance and operation of all state recreation grounds and lakes.
12. Maintain cost accounting records for expenditures in each recreation area and all other accounts under which work is done and maintain perpetual inventory of all materials and equipment assigned to the division.
13. Correspondence pertinent to detailed administrative or technical information.
14. Public relations pertinent to this division.

Construction and Engineering Operation Crews -

Operation crews are located as follows:

District 1, headquarters at Alliance, consisting of one operation manager, one working foreman and two crew members.

District 2, headquarters at Bassett, consisting of one operation manager, one working foreman and two crew members.

District 3, headquarters at Norfolk, consisting of one operation manager, one working foreman and five crew members.

District 4, headquarters at North Platte, consisting of one operation manager, one working foreman and five crew members.

District 5, headquarters at Lincoln, consisting of one operation manager, one working foreman and four crew members.

District Offices - General

You will note in expenditure figures that there has been an expenditure charge to the district offices. This expenditure included repairing of equipment, repairing and painting of tables moved in from recreation areas, attending public meetings, assignments to deer checking stations, inventory and preparation of their monthly reports.

As our cost accounting records are set up by recreation area, no reference will be made to district in the following report.

Since inauguration of the new operation crews, we have launched a general cleanup plan of all recreation areas and due to the fact that we are now operating with fewer men than in the past, we are also contacting local groups, organizations and governments in an effort to secure assistance from them in maintenance problems. This is not only being done in order to decrease expenditures by the Game Commission, but to increase local interest in their particular area. To date, this plan has been very favorably accepted as we have contacted eight local organizations and in each case they have been very willing to take over a portion of the maintenance. A system has been worked out with Boy Scout groups to do policing up of areas, including picking up of bottles and other debris. For this they will be given a merit award by the scout organization and in addition to this, each scout participating will be given a certificate of merit signed by the Executive Secretary. We feel that this will also not only be a saving to the Commission, but will provide activities for the scout group and impress upon the boys the need for better maintenance and picnicking habits. This plan has just been started, and we are receiving very favorable replies from local scoutmasters, so believe that it will be in operation by spring of 1955.

With the favorable weather that we have had this last fall, we have been able to accomplish far more work in the recreation areas than we had anticipated; however, the crews have now settled into winter scheduled work, which includes trimming of trees, repairing of buildings, tables, pumps, etc. and painting of tables which have been hauled into district headquarters. All areas have or will receive a general cleanup before spring opening. Major work consisted of:

Bridgeport Recreation Grounds - General leveling up of all picnicking area. Construction and regrading of access roads, gravel and cinder surfacing of access roads and removal of all dead timber.

Walgren Lake - Regrading of all access roads. Sheridan County Commissioners participated in this and will continue to patrol these roads.

Crystal Lake, South Sioux City - General regrading and leveling of all roads and picnic area and removal of all dead timber. This work was done, as the 1952 flood had left this in a very unsightly and almost inaccessible condition. Dakota County Commissioners participated in this work and will patrol these roads in the future.

Fremont Recreation Grounds - The residence building occupied by and rented to conservation officer was completely redecorated, also a yard around the residence was fenced in and leveled for seeding in the spring.

Dead Timber - All access roads were regraded and a new bridge constructed.

Benkelman Hatchery - Construction of a conversion dike and control to divert the main spring waters from rearing pond.

Seining Trew Headquarters - Dikes for the holding ponds near Maloney Lake were reconstructed and riprapping materials provided. Gravel blanket for rapid run-off disposal of water accumulated from loading and unloading fish near the concrete raceways was installed.

North Platte Hatchery - Two hundred feet of 12" water line which had rusted out was relaid.

Alexandria Recreation Grounds - General regrading of all access roads, cleaning out and relaying of water supply line. Jefferson County participated in this and all patrolling of roads in the future will be done by them.

Verdon Lake - General regrading of all access roads. Richardson County participated in this and will patrol roads in the future.

Louisville Recreation Grounds - Cleaning out of drainage canal and construction of a new bridge across the canal. City of Louisville and Louisville Chamber of Commerce assist with patrolling roads.

Memphis Recreation Grounds - No major work has been done in this area; however, wish to advise that the Saunders County Commissioners assist in patrolling the roads.

Operation Crews, General - Movement of all Game Commission personnel transferred and relocated in the reorganization was done by this crew. An enclosed body was rented and installed on Game Commission truck for movement of household furniture. This entailed a considerable saving to the Game Commission over commercial hauling. All equipment yards and office furniture were constructed and moved by this crew. Repairing and transferring of equipment between districts and projects was also accomplished. This figure shown is for the calendar year rather than broken down between Part A and Part B.

Total Expenditures: \$ 4,859.34.

FISHERIES DIVISION

ADMINISTRATION

Glen R. Foster, Supervisor

The administration of the Fisheries Division consists of one supervisor and a secretary, with offices in the State Capitol. The supervisor is responsible for the planning and activities of four fish hatcheries, a seining crew and five district fishery managers. In addition, he is responsible for the issuing of all fishery permits such as commercial seining-vendor permits, bait vendor permits and private fish hatchery permits. Scientific collecting permits are also issued by this division.

It is the duty of the supervisor to prepare monthly and annual reports in addition to special reports on many activities of the Fishery Division.

Detailed cost accounting on production and distribution of the various species of fish are also kept to show the actual cost of any fishery operations at the end of each month of the year.

Information from the fishery managers is used in helping to work out the stocking plans which are sent to the fish hatcheries and the seining crew. Management plans are also prepared by the supervisor for all waters of the state. During the year the supervisor visits all fishery stations and personnel on an average of once a month to discuss work plans and inspect work that is being done.

GENERAL INFORMATION

For the last several years an attempt has been made to eliminate as much as possible the application system of stocking fish, especially in the public fishing waters within the State. Instead of trying to fill applications sent in by individual fishermen and sportsmen fish stocking plans are worked out, based on studies of the various waters by the fishery managers. This results in fish being stocked where they are needed instead of a general program of stocking each body of water every year. Many bodies of water do not need restocking each year as it has been found that natural reproduction takes care of many of these waters.

Also, during the last several years an attempt has been made to produce and stock larger fish where they are needed. In past years a big percent of

the fish produced at the hatcheries was stocked in the fry and fingerling stage, and studies of many lakes have shown that this type of stocking generally does very little good, especially in lakes that already contain large fish. Most of the small fish stocked are too small to take care of themselves and are eaten by the larger fish.

An increase has also been made in transferring fish from lakes that are overpopulated to lakes near high centers of population with a heavy fishing pressure. During 1954 more adult fish were moved from over-populated lakes than has been done in past years. The big percent of these fish were bullheads which were moved to many city and state lakes, providing fishing for a large number of children and older people who were unable to travel any distance to fish. In addition to providing more fish for those people this activity also improved fishing conditions in the lakes where the fish were removed making more room for the fish that were left, thus giving them a better chance to grow to a catchable size.

The Fisheries Research section, consisting of five fish biologists, each assigned to a district, is under the Dingell-Johnson Federal Aid plan. Under the Dingell-Johnson Act the Federal tax on fishing tackle is divided among the states for the improvement of fishing. Projects have to be approved by the Federal government and when approved they will furnish 75% of the cost of these projects.

Each fishery manager is assigned definite jobs within his district. Monthly reports of accomplishments are sent in at the end of each month and semi-annual reports are prepared for the Federal officials showing the progress of each job assignment. All jobs are designed to obtain certain facts on the various waters and fish in the state to enable the supervisor to prepare better management procedures in order to improve the fishing within the state. It is hoped that in the future the trial and error methods of management can be completely eliminated and that stocking of fish and other management procedures will be based entirely on facts obtained by these biologists.

The following permits were issued by the fishery division in 1954:

Commercial Seining-Vendor	- 321
Bait Vendor	253
Private Fish Hatcheries	43

* * * * *

1954 GRAND TOTALS

PRODUCED AND STOCKED FROM HATCHERIES -- All Species..... 1,013,483

<u>Species</u>	<u>Fing.</u>	<u>Adult</u>	<u>Total</u>
Walleye	513,247		513,247
Northern Pike	7,208	60	7,268
Bullheads	1,025		1,025
Crappie	107,165	1,277	108,442
Bluegill	60,424	1,808	62,232
Black Bass	18,588	10,296	28,884
Blue Catfish	10,800		10,800
Channel Catfish	131,400		131,400
Rock Bass	10,950		10,950
Bass	48,925	1,700	50,625
Tadpole	125		125
	<u>909,857</u>	<u>15,141</u>	<u>924,998</u>

Brown Trout		3,965	3,965
Rainbow Trout	21,073	55,380	76,453
Brook Trout		8,067	8,067
	<u>21,073</u>	<u>67,412</u>	<u>88,485</u>

FEDERAL FISH STOCKED BY VALENTINE..... 89,969

Brown Trout	26,319	10,150	36,469
Rainbow Trout	22,460	17,100	39,560
Brook Trout	4,400	6,540	10,940
	<u>53,179</u>	<u>23,790</u>	<u>86,969</u>

CATFISH TRAPPED - Missouri and Niobrara Rivers - Stocked... 22,549

Catfish Trapped in 1953	16,730	16,730
Catfish Trapped in 1954	5,819	5,819
	<u>22,549</u>	<u>22,549</u>

FISH SALVAGED AND STOCKED -- All Species..... 156,569

Bullhead	200	109,978	110,178
Black Bass		513	513
Bass		12	12
Northern Pike		50	50
Crappie	1,700	18,984	20,684
Bluegill	1,840	460	2,300
White Bass		99	99
Catfish		21,961	21,961
Walleye		650	650
Drum		122	122
	<u>3,740</u>	<u>152,829</u>	<u>156,569</u>

1954 Grand Totals (Continued)

FISH SEINED AND TRANSFERRED AND STOCKED..... 968,684

<u>Species</u>	<u>Fing.</u>	<u>Adult</u>	<u>Total</u>
Bass		892	892
Black Bass		4,911	4,911
Bluegill		73,956	73,956
Crappie		77,668	77,668
Bullhead		790,650	790,650
Perch		20,585	20,585
Trout		22	22
		<u>968,684</u>	<u>968,684</u>

FEDERAL FISH STOCKED BY CRAWFORD 49,368

Brown Trout	25,568		25,568
Rainbow Trout	<u>23,800</u>		<u>23,800</u>
	49,368		49,368

FEDERAL FISH RECEIVED FROM NEOSHO, MISSOURI..... 40,643

Rainbow Trout		27,643	27,643
Largemouth Bass	<u>13,000</u>		<u>13,000</u>
	13,000	<u>27,643</u>	<u>40,643</u>

CONFISCATED FISH - Stocked..... 392

Bullheads		392	392
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FISH FROM VALENTINE TO GRETNA - Stocked 10,300

Bluegill	2,750		2,750
Bass	6,900	100	7,000
Bullhead	<u>100</u>	<u>450</u>	<u>550</u>
	9,750	550	10,300

GRAND TOTAL FISH STOCKED IN 1954..... 2,348,957

Fingerling	1,059,967
Adult	<u>1,288,990</u>
	2,348,957

ROUGH FISH STOCKED.....	146,515 #
" " SOLD	45,951 #
" " BURIED/GIVEN AWAY.	<u>81,087 #</u>
	273,553 #

FISH STOCKING RECORDS
1945-1954

1945	2,702,872
No breakdown on size	
576,856 Trout	
2,126,016 Warmwater	
1946	5,309,388
2,118,811 Fry	396,572 Trout
2,839,110 Fing.	4,912,436 Warmwater
351,467 Adult	
1947	3,174,962
1,097,916 Fry	275,952 Trout
1,775,367 Fing.	2,899,010 Warmwater
301,679 Adult	
1948	2,045,276
366,974 Fry	405,709 Trout
1,124,244 Fing.	1,639,567 Warmwater
554,058 Adult	
1949	4,175,457
951,424 Fry	332,346 Trout
2,950,274 Fing.	3,843,111 Warmwater
273,759 Adult	
1950	2,089,986
64,000 Fry	297,995 Trout
1,587,990 Fing.	1,791,991 Warmwater
437,996 Adult	
1951	1,722,514
17,457 Fry	351,027 Trout
1,239,324 Fing.	1,371,487 Warmwater
465,733 Adult	
1952	3,175,219
118,178 Fry	578,384 Trout
2,178,270 Fing.	2,596,835 Warmwater
878,771 Adult	
1953	3,413,298
145,240 Fry	372,696 Trout
2,437,142 Fing.	3,040,602 Warmwater
830,916 Adult	
1954	2,348,957
1,059,967 Fing.	268,465 Trout
1,288,990 Adult	2,080,492 Warmwater

The Commission policy of attempting to continually increase the number of adults stocked is obvious from the above record.

GRETNA FISH HATCHERY
310-54

1954

GAME FISH PRODUCED AND STOCKED..... 162,675

<u>Species</u>	<u>Fing.</u>	<u>Adult</u>	<u>Total</u>
Bullhead	1,025		1,025
Bass	5,450		5,450
Crappie	5,525		5,525
Bluegill	8,350		8,350
Tadpole	125		125
Blue Catfish	10,800		10,800
Channel Catfish*	<u>131,400</u>		<u>131,400</u>
	162,675		162,675

Rainbow Trout	21,073		21,073	21,073
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FISH SALVAGED AND STOCKED..... 7,263

Bullhead	200	3,151	3,351
Bass		12	12
Crappie	1,700	360	2,060
Bluegill	<u>1,840</u>		<u>1,840</u>
	3,740	<u>3,523</u>	7,263

FEDERAL FISH FROM NEOSHO, MISSOURI - Stocked..... 3,050

Rainbow Trout	3,050	3,050
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CONFISCATED FISH - Stocked 392

Bullheads	392	392
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FISH RECEIVED FROM OTHER HATCHERIES AND STOCKED..... 10,300

Bluegill	2,750		2,750
Bass	6,900	100	7,000
Bullhead	<u>100</u>	<u>450</u>	<u>550</u>
	9,750	550	10,300

TOTAL FISH STOCKED BY GRETNA..... 204,753

* 40,500 of this number were given to Minnesota

Gretna - 1954

PRODUCTION AND MISCELLANEOUS WORK COSTS:

(a) <u>Channel Catfish (and Blue Catfish)</u>	
Producing 142,200 Fing @ \$ 34.46 Per M.	\$ 4,900.07
Stocking 142,200 " @ \$ 1.58 Per M.	223.99
(b) <u>Rainbow Trout</u>	
Producing 21,073 Fing. @ \$ 9.46 Per M.	199.29
Stocking 21,073 Fing. @ \$ 5.61 Per M.	118.22
(c) <u>Warmwater Fish</u>	
Producing 20,475 Fing. @ \$ 101.90 Per M.	2,086.76
Stocking 20,475 Fing. @ \$ 8.27 Per M.	169.31
(d) STOCKED For Other Hatcheries (Federal-Valentine) (3,050 Federal trout and 10,300 bass, bluegill and bullhead for the Valentine hatchery)	525.92
(e) <u>Fish Salvaged, Transferred, Misc., Trips</u>	782.97
(Salvaged 3351 bullheads, 12 bass, 2060 crappie and 1840 bluegill. Stocked 392 bullhead that had been confiscted.)	
(f) <u>State Fair Exhibit</u> (Expense from Gretna Budget)..	323.39
Labor.....	\$ 216.00
Supplies.....	28.52
Travel Expense....	34.80
Gas and Oil.....	18.97
Materials-Repairs.	23.60
Tire Repair.....	1.50
	\$ 323.39
(g) <u>Improvements and Equipment</u>	498.85
Blower for oil furnace.....	169.00
Adding machine.....	108.00
Raceways	219.67
Road drag	2.18
	\$ 498.85
(h) Picnic Grounds and Aquariums	3,189.12
(i) Cost of feed trout and warmwater fish to be stocked in 1955	354.59

GRETNA HATCHERY

Hatchery production at this station was about the same as last year; however the total numbers of fish handled and stocked was lower due to less salvage fish. Fish salvage work was nearer to normal as fewer ponds dried up this year. This is partially due to requirements set up for ponds. Ponds will not be stocked unless they meet certain requirements as to depth, size, etc.

Trout production was up. The spawner trout held mainly for show fish are continually culled which gives better production from those held over. Five thousand yearling trout obtained from the Federal Hatchery at Neosho, Missouri are now being held and fed and will be stocked in the new Grove lake in the spring of 1955.

Improvements on the grounds and outside work are listed below:

The old coal furnace in the superintendent's residence was converted to an oil furnace.

The tanks on the fish distribution truck was repaired and new lids made.

Four new raceways were constructed of rock from the quarry on the grounds for better production of channel catfish.

Seven rooms in the three residences were re-papered.

Driveways were re-surfaced with crushed rock.

Fish were furnished and transported alive for a television show at the Axtell station, and gold fish returned to the Kearney State park.

Four trips were made to Neosho, Missouri for yearling trout to be stocked in Grove State lake. Two loads are being held at the hatchery for spring stocking. On these trips experiments were carried out on the use of sodium amytal and sodium seconal. 1/2 grain of amytal was used per gallon of water and seconal used at the rate of 1/4 grain per gallon. The amytal seemed to work best. By using the amytal twice the number of trout were hauled in the same amount of water as could be hauled without using it. This saves half the trips necessary and also saves on time and money. No harmful effects to the fish were noticed during transportation or afterwards.

GRETNA (Continued)

About thirty-eight trips were made away from the hatchery which included the following work;

Three salvage jobs
Eleven test seining jobs and carp removal
Three lake inspection trips
One court assist to local conservation officer
One transfer of trout to Rock Creek hatchery
One load of catfish fingerling to Windom, Minnesota
One load of warmwater fish from Valentine hatchery
One trip to Kearney to deliver goldfish
Four trips to Neosho, Missouri and Grove Lake
Ten trips to Memphis state lake
One trip to Alma to deliver a 50 lb. catfish
One trip to Schuyler to pick up confiscated bullheads.

In addition, numerous trips were made in to Lincoln to prepare and operate the State Fair Fish Exhibit.

SALVAGE AND DISTRIBUTION
310-53

1954

FISH SEINED AND TRANSFERRED..... 920,345

<u>Species</u>	<u>Fing.</u>	<u>Adult</u>	<u>Total</u>
Black Bass		4,911	4,911
Bluegill		73,956	73,956
Crappie		77,394	77,394
Bullhead		743,477	743,477
Perch		20,585	20,585
Trout		22	22
		<u>920,345</u>	<u>920,345</u>

FISH SALVAGED AND STOCKED..... 127,381

Bullhead		104,727	104,727
Crappie		18,624	18,624
Black bass		513	513
Northern Pike		50	50
White Bass		99	99
Bluegill		460	460
Catfish		2,136	2,136
Walleye		650	650
Drum		122	122
		<u>127,381</u>	<u>127,381</u>

FEDERAL FISH FROM NEOSHO, MISSOURI - Stocked 35,843

Rainbow Trout		22,843	22,843
Smallmouth Bass	13,000		13,000
	<u>13,000</u>	<u>22,843</u>	<u>35,843</u>

CATFISH TRAPPED FROM MISSOURI AND NIOBRARA RIVERS - Stocked. 22,549

Catfish (Trapped 1953)	Stocked	16,730	16,730
Catfish (Trapped 1954)	"	<u>5,819</u>	<u>5,819</u>
		22,549	22,549

(26,557 catfish are being held over for stocking spring of 1955)

TOTAL FISH STOCKED 1,106,118

TOTAL ROUGH FISH REMOVED FROM LAKES AND STREAMS:

Carp.....	240,007#	Of this Total:
Quillback;....	3,000	49,951 # sold
Buffalo.....	14,471	81,087 # buried/given away
Shad.....	13,300	<u>142,515 # stocked</u>
Sucker.....	<u>2,775</u>	273,553
	273,553 #	

SALVAGE AND DISTRIBUTION (Continued)

PRODUCTION AND OTHER WORK COSTS:

- (a) Trapping 32,376 Catfish @ \$ 45.10 Per M. \$ 1,460.26
- (b) Cost of Rough Fish removal..... 1,309.01
- (c) Income from Rough Fish sold..... \$ 3,149.25
- | | | |
|---------|----------------|-----------------|
| Carp | 31,480# | \$ 1,463.55 |
| Buffalo | <u>14,471#</u> | <u>1,685.70</u> |
| | 45,951# | 3,149.25 |
- (d) Salvage and transfer of fish from overstocked lakes, test seinings and miscellaneous jobs.. 4,803.85
- (e) New equipment and improvements..... 6,985.69

Nets.....	\$ 754.98
Fish tank for new truck.....	382.00
Lumber for boat.....	97.35
Materials--new tank on truck..	73.42
Blower equipment--new tank....	262.69
Chevrolet truck.....	1,147.21
International truck.....	1,189.94
Ford 2-Ton truck.....	<u>2,378.10</u>
	\$ 6,985.10

SALVAGE AND DISTRIBUTION
1954

For the second year in a row the seining crew continued to seine and stock fish every month of the year. Production figures on all phases of their work was up this year.

The biggest increase again this year was in the number of adult size fish seined from over-populated lakes and transferred to lakes that were heavily fished near centers of population. About four and a half times as many adult fish were removed this year compared to 1953. The majority of these were bullheads although this year there was also a large increase in numbers of black bass, bluegill, crappie and perch.

Catfish trapping from the Missouri river was also increased and also the stocking of catfish. Over 26,000 catfish trapped this year are being held over for stocking next spring before spawning time.

Removal of carp and other rough fish was more than doubled over 1953. The number of carp stocked for fishing was nearly doubled due to the increased demand for these fish from fishermen. Carp are stocked only in lakes unsuitable for game fish. Income from rough fish sold amounted to nearly three times the cost of removing and transporting the fish.

Salvage work was extremely low this year. Although this decreases the number of fish stocked it indicates that the lakes in Nebraska were in better shape throughout the year than in 1953. The less salvage work necessary, the more time the crew can spend on rough fish removal and seining of over-populated lakes.

In addition to the above work in seining and hauling fish, other work consisted of the following:

Six trips to Neosho, Missouri to haul yearling trout for stocking Grove lake.

One load of smallmouth bass was hauled from Neosho to McConaughy lake.

A new fish tank was built for one of the larger trucks. All work except welding of the tank was done by the seining crew personnel.

Two new boats for seining were constructed of redwood and pine.

Three new trucks were purchased and tanks installed.

An ice auger blade was made for the Ford tractor.

4600 feet of netting was treated and hung for seines. Made five hoop nets and repaired old nets and other fishing equipment.

A large number of fish were collected for the State Fair exhibit and two men helped at the exhibit for one week.

Two drowning victims were recovered from Johnson reservoir and Enders reservoir.

During the year 94 lakes were seined by the crew. The names of the lakes and reasons for seining are given on the next page.

SALVAGE AND DISTRIBUTION

Lakes Seined - 1954

1. Fremont Angler's Lake, Dodge County	Remove rough fish
2. Rickstein Lake, Garden County	" " "
3. C. W. Mead Lake, Douglas County	" " "
4. Bellevue Rod & Gun Club Lake, Sarpy Co.	" " "
5. Christensen Lake, Dodge County	" " "
6. Fremont Rod & Gun Club Lake, Dodge Co.	" " "
7. Wolf Sandpits, Dodge County	Salvage fish
8. Herman Pond, Buffalo county	Transfer fish
9. Harmony Pond, Buffalo County	" "
10. Adlen Pond, Buffalo County	" "
11. Moon Lake, Brown County	Test Seine
12. Flanagan Lake, Dawes County	Transfer fish
13. Swan lake, Holt County	" "
14. Flanagan Lake, Dawes County	" "
15. Crystal Lake, Dakota County	Remove rough fish
16. Swan lake, Holt County	Transfer fish
17. Duck Lake, Cherry County	" "
18. Rice Lake, Cherry County	" "
19. Clear Lake, Cherry County	" "
20. Dewey Lake, Cherry County	Remove Rough fish
21. Hackberry Lake, Cherry County	" " "
22. Martin Lake, Dawes county	Transfer fish
23. Flanagan Lake, Dawes County	" "
24. Long Lake, Cherry County	" "
25. Walgren Lake, Sheridan County	Test Seine
26. Smith Lake, Sheridan County	" "
27. Hayes Center Lake, Hayes County	Remove fish
28. Cottonwood Lake, Dawes County	Transfer fish
29. Coffee Lake, Dawes County	" "
30. Nebraska Lake, Dawes County	" "
31. Corner Lake, Dawes County	" "
32. Dewey Lake, Cherry County	Remove rough fish
33. Alkalai lake, Cherry County	" " "
34. Long Lake, Cherry County	Transfer fish
35. Hackberry Lake, Cherry County	" "
36. Hebbler Lake, Cherry County	" "
37. Dewey Lake, Cherry County	" "
38. Clear Lake, Cherry County	Remove rough fish
39. Alkalai lake, Cherry County	Transfer fish
40. Tony Lake, Cherry County	Test seine
41. Moran Lake, Cherry County	Transfer Fish
42. West Castle Lake, Cherry County	" "
43. George Lake, Cherry County	" "
44. Longfellow Lake, Cherry County	" "
45. Castle Lake, Cherry County	" "
46. Alkalai Lake, Cherry County	" "
47. Grove Lake, Cherry County	" "
48. Clear Lake, Cherry County	" "
49. Willow Lake, Cherry County	" "
50. Sutherland Reservoir, Lincoln County	Remove rough fish

Salvage & Distribution (Continued)
Lakes Seined in 1954

51. McConaughy Lake, Keith County	Remove rough fish
52. Ogallala Lake, Keith County	" " "
53. Mother's Lake, Cherry County	" " "
54. Fremont Lakes, Dodge County	State Fair fish
55. Louisville Lake, Cass County	" " "
56. Koble Lake, Grant County	Salvage fish
57. Fryear Lake, Holt County	Test seine
58. Swan lake, Holt County	" "
59. Gilman Lake, Holt County	Salvage fish
60. Rice Lake, Holt County	" "
61. Goose Lake, Holt County	" "
62. Swanson Lake, Holt County	" "
63. Fremont Lake, Dodge County	Remove rough fish
64. McConaughy Lake, Keith County	State Fair Fish
65. Lincoln Creek Cutoff, York County	Salvage fish
66. McConaughy Lake, Keith County	State Fair Fish
67. West Kimball Reservoir, Kimball Co.	Salvage fish
68. " " " " "	" "
69. Box Butte Reservoir, Dawes County	Remove rough fish
70. " " " " "	" " "
71. Whitney Lake, Dawes County	Test seine
72. Minatare Lake, Scotts Bluff County	" "
73. Minatare Lowline Canal, " "	Salvage fish
74. Kimball Reservoir, Kimball County	" "
75. Niobrara River, Knox County	Trap catfish
76. Hackberry Lake, Cherry County	Transfer fish
77. Missouri River, Knox County	Trap catfish
78. Minden Canals, Kearney County	Salvage fish
79. Keystone Canal, Keith County	" "
80. Cottonmill Lake, Buffalo County	" "
81. W. Kimball Reservoir, Kimball County	Transfer fish
82. Comstock Irr. Canal, Custer County	Salvage fish
83. Ulmer Pond, York County	" "
84. Sutherland Reservoir, Lincoln County	" "
85. Smithfield Canals, Gosper County	" "
86. Hackberry Lake, Cherry County	Transfer fish
87. Missouri river, Knox County	Trap catfish
88. Moon Lake, Brown County	Transfer fish
89. Hill Lake, Lincoln County	Remove fish
90. Fremont (new) lake, Dodge County	Remove rough fish
91. Fremont # 4 lake, Dodge County	" " "
92. Fremont Rod-Gun Club Lake, Dodge Co.	" " "
93. Fremont # 1 Lake, Dodge County	Test seine
94. Victory Lake, Fremont, Dodge County	" "

NORTH PLATTE HATCHERY
310-57

1954

GAME FISH PRODUCED AND STOCKED..... 615,945

<u>Species</u>	<u>Fing.</u>	<u>Adult</u>	<u>Total</u>
Northern Pike	7,208	60	7,268
Walleye Pike	513,247		513,247
Crappie	<u>95,430</u>	<u>60</u>	<u>95,430</u>
	615,885		615,945

PRODUCTION AND OTHER WORK COSTS:

(a) Producing 615,945 Fing. & Ad. @ \$ 35.20 Per M. \$ 21,681.45
 Stocking 615,945 Fing. & Ad. @ \$ 2.40 Per M. 1,508.84

(b) Improvements and Equipment..... 1,889.68

Tanks for hatching batteries.....	\$ 117.70
Gill nets.....	56.70
Irrigation hose	63.54
Plastic hatching jars.....	224.00
Faucets for plastic jars.....	35.00
Irrigation pipe	730.00
Kitchen sink for residence.....	73.00
Kitchen cabinet top for residence.....	67.35
Wallpaper (& labor) for residence.....	47.39
Plants of trees and grass.....	<u>475.00</u>
	\$ 1,889.68

NORTH PLATTE FISH HATCHERY
1954

1953 was a record year for walleye production, and it will be hard to surpass that production any time without more rearing ponds. In 1954 we were a long way from equaling the 1953 production. The big percent of the eggs obtained for this year were from a new source and we were unfortunate in getting a poor batch of eggs. Plenty of eggs were hatched to stock the rearing ponds but evidently the fry were weak and not able to survive to fingerling size; however, enough fingerlings were raised and stocked to take care of all reservoirs and other waters. With the aid of a new fishery manager in that area we hope to work out some of our problems in the future.

In addition to walleyes, northern pike and crappie were raised. Some of the ponds were used for three crops of fish due to the difference in spawning time. Northern pike production was up over 1953, but still far from satisfactory. Better methods must still be worked out for taking and fertilizing the eggs.

Other work and improvements are as follows:

New tanks were installed for the egg hatching batteries and batteries were repaired and painted.

New gill nets were purchased and old nets repaired.

The sprinkler irrigation system for the grounds was completed by the purchase and installation of additional portable irrigation pipe and hose.

New plastic hatching jars were used this year. They are less costly and almost unbreakable.

The superintendent's residence was improved by the installation of a new kitchen sink and linoleum cabinet top. One room was re-papered and woodwork and floors refinished.

A boat rack was built for the truck.

5000 trees and shrubs were planted and the entire grounds mowed and cleaned periodically.

The hatchery building and tool shed was re-painted and repairs made.

Approximately 200 lineal feet of 12" water main was relaid with new pipe with the aid of the Construction Crew.

BENKELMAN AND ROCK CREEK
310-58
1954

GAME FISH PRODUCED AND STOCKED..... 150,405

<u>Species</u>	<u>Fing.</u>	<u>Adult</u>	<u>Total</u>
Brown Trout		3,965	3,965
Rainbow		55,380	55,380
Brook		<u>8,067</u>	<u>8,067</u>
		67,412	67,412
Black Bass	18,588	10,296	28,884
Crappie		851	851
Bluegill	40,500	1,808	42,308
Rock Bass	<u>10,950</u>	<u>12,955</u>	<u>10,950</u>
	70,038		82,993

FISH SALVAGED AND STOCKED..... 21,925

Bullhead	2,100	2,100
Catfish	<u>19,825</u>	<u>19,825</u>
	21,925	21,925

TOTAL FISH STOCKED..... 172,330

PRODUCTION AND MISCELLANEOUS COSTS:

(A) Producing 67,412 Adult Trout @ \$ 317.18 Per M.	\$ 21,381.80
Stocking 67,412 " " @ \$ 14.45 Per M.	974.20

Trout eggs to be stocked in 1955 (Cost to January 1, 1955).....	3,124.08
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(B) Producing 82,993 Fing-Ad. Warmwater @ \$ 96.04 Per M.	7,970.70
Stocking 82,993 " " " .89 Per M.	74.62

(C) Improvements and Equipment.....	2,063.00
-------------------------------------	----------

Adding Machine.....	\$ 108.00
Uniforms.....	209.50
Electric pump - refrigerator.	98.50
1/2 HP motor.....	52.00
Oil furnace for residence....	950.00
Food chopper.....	570.00
Microscope.....	<u>75.00</u>
	\$ 2,063.00

ROCK CREEK AND BENKELMAN
1954

Production of both trout and warmwater fish was about average this year, although down somewhat from 1953. All fish produced, however, were in excellent condition and we received many comments on the larger size trout stocked last spring.

More trouble with parasites was experienced this year with some loss of trout; however, it has been kept under control by use of chemicals. The use of malachite green on the trout eggs has stopped the fungus on the eggs while hatching.

A new 4" pipe line to the hatch house was installed which will provide more water to the trout hatching troughs.

Additional hatching troughs were set up on a new concrete floor outside of the hatch house to keep from overcrowding the small fry, and to better control the temperature on the brown trout.

A new concrete water regulating box was installed for the hatch house.

Trout pond # 14 was completely cleaned out by flushing with a power pump. A centrifugal pump was mounted on a Ford tractor to give plenty of power. This will be used to flush out all rearing ponds as necessary.

Four new concrete spillways were constructed on ponds # 1, 2 and 4, and a new outlet pipe installed in pond # 2.

All dams were rip-rapped with railroad slag with the aid of the construction crew. A stock pile of slag was hauled in also for future use. The slag is heavy and is ideal for keeping banks from eroding.

The superintendent's residence, and all other buildings at the Benkelman station, were rewired for electricity. The entire hatchery was wired for a 32 volt battery system and, consequently, wires were too light to stand the load. This completes the rewiring of all the state fish hatcheries and eliminates many dangerous fire hazards, as well as personal dangers to the employees.

The grease rack at the Rock Creek hatchery was repaired and enlarged for the larger trucks.

A new concrete floor and large doors were built in the storage shed to provide space for truck and food storage.

Repairs were made to one of the concrete holding tanks.

A new oil heating system was installed in the superintendent's residence to replace the old, burned out coal furnace.

VALENTINE HATCHERY
310-55
1954

GAME FISH PRODUCED AND STOCKED..... 73,685

<u>Species</u>	<u>Fing.</u>	<u>Adult</u>	<u>Total</u>
Bluegill	11,574		11,574
Crappie	6,210	426	6,636
Bass	<u>43,475</u>	<u>1,700</u>	<u>45,175</u>
	61,259	2,126	63,385

Given to Gretna 10,300 10,300

FISH TRANSFERRED AND STOCKED..... 48,339

Bullhead		47,173	47,173
Crappie		274	274
Bass		<u>892</u>	<u>892</u>
		48,339	48,339

FISH STOCKED FOR CRAWFORD..... 86,969

Brown Trout	26,319	10,150	36,469
Rainbow	22,460	17,100	39,560
Brook Trout	<u>4,400</u>	<u>6,540</u>	<u>10,940</u>
	53,179	33,790	86,969

FEDERAL FISH FROM NEOSHO, Missouri - Stocked..... 1,750

Rainbow Trout 1,750 1,750

TOTAL FISH STOCKED.... 200,443

PRODUCTION AND OTHER WORK COSTS:

- (a) Producing 73,685 warmwater fing-Ad. @ \$ 54.45 Per M. \$ 4,012.27
- Stocking 73,685 warmwater fing-ad. @ \$121.88 Per M. 7,725.61
- (b) Cost of stocking 88,719 trout for Crawford-Missouri 1,384.51
- (c) State Fair Exhibit..... 117.80
- (d) Miscellaneous salvage, Other work..... 949.59
- (e) Picnic Grounds and Aquariums..... 100.00

VALENTINE HATCHERY

1954

More warmwater fish rearing ponds were held over this year than normal as we have far more requests for stocking in the spring than in the fall months. The stocking of fingerlings, therefore, was below normal during 1954. The total adults stocked, however, was double the number stocked last year. Much time was spent throughout the year in obtaining spawner bass, both for use as spawners at the state hatcheries and the Federal hatchery at Crawford and for stocking purposes.

The hatchery personnel also worked with the seining crew in removing fish from several over-populated sandhill lakes.

The portable fish transportation tanks started in late 1953 were completed and put into use early in 1954.

Work on the new 12" water supply line was also completed.

Drain tile was installed from septic tanks with the help of the construction crew.

Storm windows were installed on windows of residences.

Two residence porches were screened.

The hatchery personnel also spent considerable time transferring bullheads from sandhill lakes to state lakes in eastern Nebraska.

One load of adult trout was hauled to the Grove State lake from Neosho, Missouri.

Fish were collected for the State Fair Exhibit and one man spent a week helping during the exhibit.

Considerable repair work was done on roads, dikes and dams on the grounds.

* * *

FEDERAL FISH STOCKED

BY

CRAWFORD FEDERAL HATCHERY

TROUT STOCKED BY CRAWFORD..... 49,368

<u>Species</u>	<u>Fing.</u>	<u>Adult</u>	<u>Total</u>
Brown Trout	25,568		25,568
Rainbow Trout	<u>23,800</u>		<u>23,800</u>
	49,368		49,368

The Fisheries Division cooperates and works closely with the Fish and Wildlife Service. Federal applications for fish to go into Nebraska waters must be approved by the State Fishery Division before they will allot fish for this purpose. Under an agreement with the Fish and Wildlife Service, many of the Federal fish produced at the Crawford station are stocked with state trucks and personnel. In return for this service the Crawford station allots all of their adult trout to the State of Nebraska for stocking waters within the state. In addition, many thousands of fingerling trout and warmwater fish are also turned over to the state. A big percent of the trout eggs hatched at the State hatcheries are furnished to us from Crawford, or some other Federal station.

By working together on the fish program within the state we have avoided duplication of effort and saved considerable amounts in transportation.

* * * * *

FISHERY RESEARCH

During the first half of 1954 the fishery research division was operated in about the same manner as in the past, with the exception of one biologist who was stationed at the North Platte hatchery. Mr. Leman was placed at North Platte to help work out problems in taking northern pike and walleye eggs, and also to start an intensive study of Lake McConaughy. Little information was obtained as Mr. Leman resigned the latter part of May.

Dr. Kiener and Elmer Carlson, the two other fishery biologists, tried to cover the entire state, acting mainly as trouble shooters in responding to requests from clubs and individuals who had fish or lake problems. During these trips the opportunity was taken to make tests and investigations on reservoirs, state lakes and streams. One exception was made, however, when Mr. Carlson spent a few days of each week for several months in studying the Fremont state lakes. Valuable information was obtained and recommendations given for improvement of fishing conditions.

Assistance was given to the Rock Creek Fish hatchery in the control of parasites and to the North Platte hatchery in problems concerning pond fertilization and walleye production.

Considerable time was spent in the laboratory in classifying and filing notes, sample fish, scales and plankton samples, and in taking care of the necessary reports and correspondence. Many conferences and talks with individuals and sportsmens groups also was necessary and is considered an important part of the job.

The new district plan approved by the Commission has changed the operation of the Fisheries Research division considerably. With five districts in the state three new fishery managers were hired. One man started July 1 and the other two August 1.

The entire Fisheries Research division was set up as a Federal Aid Project under the Dingell-Johnson Bill. Each fishery manager was assigned to a district and a definite job outline worked out for each district.

The starting of an entirely new operational plan of this kind takes time, especially when new men are employed. Much time is necessary for new employees to become acquainted with the state as well as the state's fishery problems. Following is a general outline of activities during the latter half of 1954.

ACTIVITIES OF THE FISHERIES RESEARCH DIVISION

DINGELL-JOHNSON PROJECT
100-F-4-R

JULY 1, 1954 to DECEMBER 31, 1954

DISTRICT NO. 1

FISHERY MANAGER: Jack Heaton

JOB ASSIGNMENTS:

Job No. 1 - Trout Stream and Lake Inventory and Management

Job No. 6 - Public Power and Irrigation Reservoir Investigations

Jack Heaton was hired July 23, 1954 and assigned to District 1 at Alliance. August and most of September was spent mainly in becoming familiar with the area covered by District 1 and getting acquainted with department personnel, sportsmens groups and individual fishermen. Several staff meetings were attended in the Lincoln office. Considerable time was also spent in setting up an office and collecting maps and copies of past information pertinent to fish or fishing in District 1.

Work on the above assignments was delayed somewhat by the lack of testing and other necessary equipment. During the fall and winter months, however, Job No. 1 and Job No. 6 was started by a reconnaissance of all the trout streams and each stream was walked to obtain general information as to their physical characteristics. Physical data was also obtained on the reservoirs as well as operational procedures for each. Reservoirs were also visited during seining operations. Scale samples of various species were taken and records made on general condition of the fish.

During the fall months trout movement and spawning activity was observed in as many streams as possible. In several streams these examinations indicated that there may be enough natural spawning to justify the discontinuation of annual stocking. Further study is of course necessary before definite recommendations can be made. It was also found that brook trout seem to do better in some streams than other species, and brown and rainbow more suitable for others. Enough information has been obtained on some streams to justify changes in trout stocking plans for experimental purposes.

Several days were spent in helping out at the Rock Creek hatchery in controlling trouble with parasites.

All sportsmen's meetings were attended when possible.

About two weeks were spent in helping game biologists during the deer season. However, at the same time as much information as possible was obtained on trout streams and fishing the area worked.

* * *

DISTRICT NO. II

FISHERY MANAGER: D. Bruce McCarraher

JOB ASSIGNMENTS:

- Job No. 1 - Trout Stream and Lake Inventory and Management
- Job No. 2 - Sandhill Lakes Study

Donald Bruce McCarraher was hired August 1, 1954 and assigned to District II at Bassett. It was late in the fall before a headquarters building was available, making it difficult to set up files, records and laboratory. As with other new men much time was necessary in becoming familiar with the area covered by the district and getting acquainted with department employees and other individuals and groups interested in fishing.

Several trips were made into Lincoln to attend meetings and to pick up supplies. Information was also obtained from the Lincoln office files pertinent to fisheries in District II.

The two above jobs were started by a general reconnaissance of the trout streams and natural sandhills lakes. This was done in the company of conservation officers and fish hatchery employees to learn as much as possible of the past history of these areas.

Personnel of the Valentine Federal Wildlife Refuge were contacted and plans worked out for a study of several fishing lakes within the refuge. Plans were also formulated for the renovation of Hackberry lake to be started in the spring of 1955. SCS offices were contacted to obtain maps and other information on lakes and streams. Many fishermen were contacted while fishing through the summer, fall and winter to obtain information on lakes and streams and fishing success. Gill netting was carried on in several lakes to obtain information on fish conditions and populations. Several days were spent in the inspection of farm ponds in the district and recommendations given to pond owners for better management.

During the fall months trout streams were checked for trout movement and spawning activities. Several days were spent with the personnel of the Fish and Wildlife Service River Basin Studies on proposed developments in Custer and Sherman counties. All sportsmen's meetings were attended when possible to obtain and give information on fishing conditions.

After testing equipment was received, water samples were collected from seven lakes and tests made to determine alkalinity, O₂ and CO₂.

Two weeks were spent in helping game biologists during the deer season.

The headquarters building in this district was not completed until December which delayed setting up the fishery office and laboratory.

* * *

DISTRICT NO. III

FISHERY MANAGER: Elmer Carlson

JOB ASSIGNMENTS:

Job No. 3 - Grove Lake Studies and Management

Job No. 4 - Crystal Lake Studies and Management

Job No. 5 - Investigations and Management of Gavins Point Reservoir

Elmer Carlson, who has been with the department since 1951, was assigned to District No. III at Norfolk. Since he was partly familiar with his area little time was spent in going over the area and work on job assignments was started at once.

It was necessary to work out of the Lincoln office until headquarters were available in Norfolk in September.

In addition to the three principal job assignments for District III other work consisted of the following:

Technical advice was given to two groups on management of their lakes.

Test seining was done in two lakes - one for an individual and one for a sportsmen's group.

A reconnaissance survey was made of six creeks and fourteen farm ponds to determine suitability for stocking with Federal fish.

Two talks were given to two sportsmens groups.

Suggestions for changes in state fishing regulations were submitted.

Three pheasant counts were made for the Game division.

A report of accomplishments on each of the three Dingell-Johnson jobs follow.

Sampling stations were set up on Grove and Crystal lakes where tests were made at regular intervals during the year. Detailed records have been kept on biological and physical conditions, both before and after impoundment.

After Grove lake was full it was found that there was no oxygen in the deeper part of the lake making it necessary to open the lower outlet a little to help mix the water.

Sand movement in the stream above Grove lake was checked and records kept. Turbidity and bank erosion was watched carefully and studies made to recommend control measures.

District III, Continued

Stocking plans were worked out for Grove lake and regular checks made of the growth of all species and their reproduction.

Grove lake was opened to fishing July 24, 1954 and a creel census made over the first few weeks.

At Crystal lake much was learned from rough fish removal operations of the seining crew as to population and condition of the various species present in the lake. Studies on this lake were carried on similar to those on Grove lake.

Gavins Point Reservoir is not complete at this time but information has been obtained and records kept on the progress of the work.

Numerous meetings were attended regarding development and operation procedures. Plans were worked out with South Dakota fisheries personnel regarding future fishery management.

Photographs were taken of the area to be covered with water for study purposes. All physical data was obtained as well as information on the present fish populations in the river.

* * *

DISTRICT NO. IV

FISHERY MANAGER: Orty E. Orr

JOB ASSIGNMENTS:

Job No. 6 - Public Power and Irrigation Reservoir Investigations

Orty E. Orr was another of the new fishery managers starting work July 1, 1954 and assigned to District No. IV at North Platte.

Headquarters were set up at the North Platte State Fish Hatchery until a district headquarters building was available in the late fall. In this case it was also necessary for the fishery manager to spend considerable time in becoming familiar with his area and getting acquainted with personnel and sportsmen. North Platte Hatchery employees and conservation officers assisted in showing the fishery manager over his area and provided information on past history of many of the waters to be studied.

Several staff meetings in Lincoln were attended and meetings with sportsman clubs helped in learning some of the fishery problems in the area.

District No IV includes an area with over 30 large to small reservoirs, besides the Republican and Platte rivers and many smaller ponds and lakes. It was decided to concentrate on specific reservoirs and obtain as much information as possible on the others as time permitted.

Collections of data including lengths, weights, scales and stomach contents, etc., were taken during seining crew operations. Some test seining and trapping was also done on McConaughy and Harlan County reservoirs.

Officials of the Tri-County Irrigation district were contacted and maps and physical data on the reservoirs obtained.

Bureau of Reclamation offices were also visited where similar data was obtained on the reservoirs on the Republican River drainage.

Operational procedures of the various irrigation projects were discussed with officials of the district.

A few days were spent in a reconnaissance trip with personnel of the River Basin Studies group on the proposed Sherman reservoir near Loup City.

A few days were also spent in helping on control of parasites at the Rock Creek State Fish hatchery.

Two weeks were spent helping game biologists during the deer season.

Some time was spent in constructing the frame work for a scale reading machine, and in setting up a fishery office and laboratory in the new headquarters building.

* * *

DISTRICT NO. V

FISHERY MANAGER: Walter Kiener

JOB ASSIGNMENTS:

- Job No. 7 - Catfish Migration and Population Inventory of the Blue River system
- Job No. 8 - Compilation of past investigations
- Job No. 9 - Gravel Pit lakes, Studies and Improvements
- Job No. 10 - Watershed Development Studies and Management

Walter Kiener, who has been with the department since 1943, was assigned to District V in Lincoln. Since numerous jobs and investigations were being carried on the first few months, July, August and September were spent mainly in completing these jobs that had been assigned. During that time, however, considerable time was spent in conference with new fishery biologists in getting them familiar with our past work in the biology division, and helping in the collection of information and reports on areas within their districts. Some time was also spent in completing work on plankton samples and collections to be made available to the other fishery managers. Samples were carefully divided into duplicate sets and accurately labeled. One set was sent to Chicago to Dr. Dronet of the Chicago Natural History Museum for correct identification.

Other work during July, August and September consisted mainly of trouble shooting assignments, however, some time was used in helping work out detailed outlines for the Dingell-Johnson jobs for District V.

Several staff and reorganization meetings were attended both with state officials and Dingell-Johnson officials from Minneapolis.

From October to the end of the year work was started on Job No. 8 and No. 10. Little was done on Jobs 7 and 9. Most of the time was spent on Job 8 in working up condensed reports of past investigations pertinent to other districts and for their use in working on their various jobs.

Age and growth data was extracted from field books on McConaughy lake and other reservoirs.

Reports were started on the various trout streams, mainly in District No. 1. At the present time the report on Lodgepole creek is nearly completed. This will include water usage by irrigation, reservoirs present and other pertinent information.

Lists of equipment and specifications were worked up for the district fish managers.

On Job No. 7 some time was spent on maps of the Blue River system. Part of the West Blue River was checked and information recorded on tagged catfish caught that had been tagged in the early spring.

Physical data was obtained of the Power Dam No. 2 near Dorchester as well as the lakes and streams in that area.

District V, Continued

On Job No. 10 - Watershed Studies - several days were spent in the field with fishery men of the Fish and Wildlife Service checking eleven proposed reservoir sites on the Salt-Wahoo Watershed.

Several conferences were held with the River Basin Studies men regarding proposed plans and in working up recommendations to be presented to the various groups for improvement of these reservoirs for fishing.

One 15-acre conservation pond has been completed and recommendations given for stocking.

It is planned to attend all meetings possible on the various watershed programs in order to keep up with developments and be better able to properly manage these ponds and lakes when they are built.

* * *

A N N U A L R E P O R T

1 9 5 4

GAME DIVISION

Administration

Lloyd P. Vance - Supervisor
Jean Marie Clark - Secretary

Game Farm

Orden E. Allen - Superintendent - Norfolk
John F. Stephen - Foreman - Sacramento

State Trapper

Harold Miner - Trapper

Federal Aid

Pittman-Robertson

J. Henry Sather - Project Leader

Stanley E. Smith - Game Manager - District I
Harvey Miller - Game Manager - District II
 - Game Manager - District III
Dan Heyl - Game Manager - District IV
George Schildman - Game Manager - District V

Special Pheasant Study

Phil Agee
Max Hamilton

Deceased

S. E. Ling - Superintendent - Norfolk Game Farm

WATERFOWL

Breeding Ground Conditions

General observations indicated that water levels of western sandhill lakes were comparable to 1953. In the eastern sandhills, there was a loss of available water areas. Lake levels controlled primarily by ground water were nearly as high as the 1951 record levels. Wet meadows and potholes were low in April, and significant numbers of these areas dried up and disappeared as the season progressed, reducing the amount of water area suitable for breeding waterfowl in the eastern sandhills.

In general, the weather was adverse for breeding waterfowl. Unseasonably mild conditions prevailed early in the season and caused an advancement in the first observed breeding activities. Favorable nesting conditions were followed by severe freezes in early April, and again in late May, disrupting nesting activity during those periods. A short period of normal spring weather was followed by hot, windy weather during the latter part of June and up to mid-July.

Breeding ground population surveys indicated that the breeding population for the western portion of the sandhills was similar to that of 1953, but down about one-third from the six-year average. A significant breeding population drop was noted also in the eastern portion of the sandhills. The data indicated about a 50% drop as compared to 1953.

Brood surveys conducted in July indicated that the May freeze and blizzard caused nest destruction among the early nesting species, primarily mallards and pintails. Unusually large numbers of newly-hatched broods of these species noted during the mid-July brood survey indicated that some of these losses were followed by successful renesting attempts. The large number of newly-hatched broods of all species indicated that the May storm had caused a general delay in nesting. As compared to 1953, the survey revealed a 7% increase of broods per square mile in the western sandhills area, a 59% decrease in the eastern sandhills area, and a 13% decrease for the entire sandhills region.

Banding Operations

From July 20 to July 25, and from July 31 to August 10, a total of 1,187 non-flying ducklings was captured and banded in the sandhill region. Our objective is to obtain information pertaining to migration patterns of Nebraska-reared ducks.

The number of each species banded is presented in Table I.

Winter banding was carried on at the Leshara banding station in Saunders county for the fourth consecutive year. A total of 1,046 mallards was banded.

Table I
Summer Banding
July 20-25 and July 31-August 10, 1954

Species	Duckling	Adult	Duckling	Adult	Total	Duckling
	Male	Male	Female	Female	Bands	Male:100 Female
Mallard	32	1	34	3	70	96:100
Gadwall	9	1	6	1	17	--
Pintail	34	-	26	3	63	131:100
Green Wing	2	-	5	1	8	--
Blue Wing	478	46	393	54	971	122:100
Shoveller	8	3	4	1	16	--
Redhead	18	-	20	-	38	90:100
Canvasback	2	-	-	-	2	--
Scaup	-	-	-	1	1	--
Coot	-	-	-	-	1	--

Hunting Success

For the first time a survey was conducted to obtain information pertaining to waterfowl hunting success. Questionnaires were sent to 6,300 hunting permit holders. This survey has not as yet been brought to completion.

ANNUAL FUR HARVEST SURVEY

Fur-take questionnaire cards were mailed to 3,882 of the 4,740 trappers purchasing permits for the 1953-54 trapping season. Usable cards were returned by 23.6% of the trappers. The calculated number of active trappers was 4,675.

The calculated take of 233,000 furs (all species included) was 78% of the previous year's calculated take. A 24% decrease in muskrat, and a 43% decrease in beaver, accounted for 86% of the total decrease. The results indicated that fewer numbers of all species, except spotted skunks and raccoons, were taken.

The decreased muskrat take for the state as a whole was due primarily to a big drop in the western zone, which is the main muskrat producing area. The average take per trapper in the western zone dropped from 136 to 97; in the eastern zone the average take remained the same as the year before, 39.

The mink catch of 16,640 was down from the 18,740 taken during the 1952-53 season; 69% of the trappers reported taking this species.

Average prices as reported by trappers were low for all species,

and in most cases they averaged lower than last year. Muskrats brought an average of about \$.67; beaver, \$6.58; and mink, \$12.94.

Trappers frequently indicated that they did not pelt or sell many of the low-valued, long-haired pelts. This was also true of small beaver.

The results of this survey as compared to 1951-52 and 1952-53 are presented in Table II.

Table II
Fur-Take Data From Trapper Cards

S t a t e	T o t a l s			Average Number of Pelts Taken Per Trapper Reporting Take			Per- cent of Trap- pers Taking	Ave. of Ave. Price Received By Trap- pers
	1951-52	1952-53	1953-54	Area		State- wide		
				I	II			
Badger	521	929	446	4.50	1.71	1.83	5.1	\$.74
Beaver	4,933	11,475	6,570	8.00	6.73	6.88	20.2	6.58
Bobcat	67	45	46	1.00	2.67	2.25	.3	—
Civet	2,175	1,218	1,728	3.50	3.98	3.96	9.2	.47
Coyote	3,836	4,070	1,733	4.00	5.17	5.14	7.1	1.90
Red Fox	277	277	783	—	4.08	4.08	4.1	2.12
Mink	13,053	18,738	16,639	8.15	4.88	5.09	69.0	12.94
Muskrat	366,921	222,400	168,877	97.40	39.87	43.91	81.2	.67
Opossum	5,733	6,413	5,870	2.44	6.24	6.06	20.5	.22
Raccoon	26,506	21,378	24,133	7.31	9.84	9.69	52.6	1.53
Skunk	8,654	9,652	5,906	17.18	5.75	6.85	18.2	.83
Weasel	727	812	327	1.45	1.34	1.37	5.0	.76
All Species	433,505	297,085	233,048			49.18		

SALE OF FUR

Fur taken by the state trapper, who is also assigned other duties, is offered for sale year year. Following is a record of the kind and amount of fur sold during the past three years:

	<u>1952</u>		<u>1953</u>		<u>1954</u>	
	No.	Selling Price	No.	Selling Price	No.	Selling Price
Muskrat	316	\$ 291.30	479	\$415.00	482	\$ 270.90
Beaver	132	1,193.50	118	751.00	267	1,391.50
Mink	8	68.00	8	65.00	15	202.00
Raccoon	8	4.00	4	7.00	9	18.00
Opossum	3	.50	-	---	-	---
Badger	1	.50	-	---	-	---
Wildcat	2	1.00	-	---	1	2.00
	470	\$1,558.80	609	\$1,238.00	774	\$1,884.40

ANTELOPE

During the September season, checking stations were established at the following points: Oshkosh, Bridgeport, Gering, Alliance, Crawford, and Harrison. Two technically trained men were assigned to each station.

A total of 421 antelope was brought through the checking stations; 84.2% of the permits. A total of 326 (or 77.4%) of these animals was killed the first day.

Adult bucks composed over 59% of the total kill. Adult bucks made up over 60% of the third day's kill. Most hunters were selective in their shooting, preferring to take bucks.

The hog-dressed weights of animals harvested from the three management areas are presented in Tables III, IV, and V. It appears that the average male antelope reaches its top weight at four years of age. The average doe reaches her near maximum weight at the age of one year and gains slowly from then on.

Hunters took their antelope from three rather distinct areas: Northern Sioux county area (north of the Pine Ridge); Sioux-Box Butte county area; and the Garden county area. A total of 69 antelope were taken in the north Sioux county area; 288 in the Sioux-Box Butte county area; and 64 in the Garden county area.

The contents of 13 antelope stomachs were collected during the season and analyzed (Table VI). Broad-leafed herbaceous plants (mostly weedy plants) made up 82% by volume. Agricultural crops (corn, alfalfa, and barley) occurred in 8 stomachs and made up 10% by volume. Grasses made up less than 2% by volume. Polygonums (smartweeds) occurred in all but 1 of the samples and made up 39% of the total volume.

Plans were drawn up for an annual inventory of antelope. Included in these plans are aerial surveys, ground survey routes, and landowner interviews. Our objective is to obtain information pertaining to population trends and to determine reproductive success.

Table III
Hog-Dressed Weights of Antelope From the North Sioux
County Management Area

Age	M A L E S				F E M A L E S			
	No.	Min.	Max.	Mean	No.	Min.	Max.	Mean
Kid	3	35#	37#	36.0#	4	34#	38#	35.7#
1 Year	16	58#	86#	75.7#	7	50#	72#	60.5#
2 Years	10	72#	91#	79.9#	3	55#	73#	65.0#
3 Years	7	67#	95#	85.4#	4	61#	81#	67.2#
4 Years	7	91#	103#	94.0#	-	--	--	--
4-plus	4	86#	96#	90.2#	2	61#	77#	69.0#

Table IV
Hog-Dressed Weights of Antelope From the Box Butte-
Sioux County Management Area

Age	M A L E S				F E M A L E S			
	No.	Min.	Max.	Mean	No.	Min.	Max.	Mean
Kid	16	27#	45#	37.8#	13	28#	42#	38.4#
1 Year	39	62#	87#	76.7#	30	56#	88#	68.5#
2 Years	33	70#	103#	87.0#	11	63#	81#	69.2#
3 Years	19	76#	101#	84.3#	10	63#	81#	71.1#
4 Years	32	78#	108#	91.8#	12	60#	79#	70.9#
4-plus	26	85#	108#	85.6#	12	63#	84#	71.8#

Table V
Hog-Dressed Weights of Antelope From the Garden County Area

Age	M A L E S				F E M A L E S			
	No.	Min.	Max.	Mean	No.	Min.	Max.	Mean
Kid	3	37#	48#	42.6#	4	29#	38#	33.5#
1 Year	12	66#	85#	73.6#	8	49#	80#	67.1#
2 Years	3	84#	89#	88.0#	5	61#	84#	68.2#
3 Years	12	71#	101#	86.6#	2	73#	76#	74.5#
4 Years	5	86#	92#	86.6#	3	61#	70#	66.3#
4-plus	4	77#	96#	89.0#	2	74#	79#	76.5#

Table VI
Results of Analyses of 13 Antelope Stomachs *

Food Items	Number of Occurrences	Percentage by Occurrence	Percentage by Volume
Corn	2	15.4	7.1
Alfalfa	6	46.1	8.2
Polygonums (smartweed)	12	92.3	38.7
Sage	7	53.8	13.1
Ground Cherry	7	53.8	6.3
Prickly Pear (cactus)	3	23.1	5.6
Unidentified Composites (sunflower, aster, daisies, etc.)	7	53.8	2.6
Euphorbia sp. (spurge)	5	38.4	1.4
Unidentified & Other Forbs	9	69.2	10.8
Grass	9	69.2	1.6
<hr/>			
Agricultural Crops	8	61.6	10.4
Weedy Forbs	13	100.0	78.7 **
Grasses	8	61.6	1.6

* Only 12 stomachs are included in volume percentages.

** Includes Prickly Pear Cactus.

DEER

The 1954 deer season was the 6th consecutive open season on deer in Nebraska, and the seventh open season in recent years. In the eastern portion of the state this was the 2nd open season. The portion of the state open to deer hunting was divided into four areas, with each area open five days. These areas were:

Area I

Located in the southern panhandle -- included Scotts Bluff, Banner, Kimball, Morrill, Cheyenne, and Garden counties. The first four days, December 4 through 7, were open to antlered deer only, and the last day, December 8, was open to any deer. There were 1,500 permits issued to this area.

Area II

Located in the northern panhandle -- included Sioux, Dawes, Box Butte, and Sheridan counties. The first four days, December 4 through 7, were open to antlered deer only, and

the last day, December 8, was open to any deer. There were also 1,500 permits issued in this area.

Area III

Located in north central Nebraska -- included Cherry, Keya Paha, Brown, and Rock counties. The entire five days, December 11 through 15 were open to antlered deer only. There were 500 permits issued in this area. This was the 2nd open season in this part of the state.

Area IV

Located in northeastern Nebraska -- included Boyd, Cedar, Dakota, Dixon, Holt, and Knox counties. All five days, December 11 through 15, were open to antlered deer only. There were 500 permits issued in this area. This was the 2nd open season in this part of the state.

The hunting hours in all four areas were from one-half hour before sunrise to one-half hour after sunset. Hunters were required to bring their deer to a checking station to be lawfully sealed.

Four counties -- Thomas, Blaine, Deuel, and Keith -- which were open during the 1953 season were closed during the 1954 season.

There was a total of 2,754 deer checked through the checking stations; 68.9% of the 4,000 permittees bagged deer. The highest hunter success of 76.5% was in Area II.

The age of harvested deer furnishes valuable information for deer management. During our first season in the panhandle area (1949), yearling bucks made up 22% of the kill. In this same general area in 1954, they made up 52% of the kill. At the same time, 6½ year old animals decreased from 18% to 1% of the kill. These figures indicate that we are harvesting our bucks rather close. Our continued high hunter success indicates that we are not over-harvesting the deer herd. Our herd has gradually changed from a predominantly trophy producing herd to a predominantly meat producing herd.

The largest mule deer buck weighed 231 lbs. hog-dressed. The largest white-tailed deer buck weighed 216 lbs. hog-dressed. The largest mule deer doe weighed 136 lbs. hog-dressed. The average weights indicated that the physical condition of all deer harvested was good.

Information obtained pertaining to the time of kill revealed that in the panhandle area most deer were killed during the early morning and late afternoon hours. The eastern areas showed a high kill in mid-morning.

DEER HUNTING

<u>Year</u>	<u>Permits Issued</u>	<u>Deer Sealed</u>	<u>Permits Successful</u>
1945	500	361	72.2%
1949	1500	910	60.2%
1950	1000	686	68.6%
1951	1200	712	59.3%
1952	2500	1921	76.84%
1953	5300	4068	76.75%
1954	4000	2754	68.9%
	<hr/>	<hr/>	<hr/>
	16,000	11,412	71.3%

1954 DEER SEASON

<u>Area</u>	<u>Season Dates</u>	<u>Applications Received</u>	<u>Permits Issued</u>	<u>Deer Sealed</u>
I	Dec. 4-8	1817	1500	1024
II	Dec. 4-8	2177	1500	1147
III	Dec. 11-15	886	500	377
IV	Dec. 11-15	1310	500	205
		<hr/>	<hr/>	<hr/>
		6,190	4,000	2,754

SALE OF VENISON AND HIDES

Sale of venison from deer salvaged from accidental highway kills was discontinued during 1954. Prior to stopping such sales, a total of 793 lbs. of venison was sold at the rate of \$.45 per pound, returning \$356.97 in revenue to the department general fund.

<u>Year</u>	<u>Venison Sold</u>	<u>Amount Received</u>
1949	572#	\$256.80
1950	1610#	724.50
1951	1441#	676.60
1952	1577#	828.60
1953	664#	304.65
1954	793#	356.97
	<hr/>	<hr/>
	6,657#	\$3,148.12

Records of highway killed deer were practically discontinued during 1954. Hides of some of the deer killed on the highways were removed, salted, and sent to the Department holding plant in Lincoln, where they were sold to the highest bidder prior to the annual gun sale. Some 31 such hides were sold for \$45.45.

Wildcat Hills Big Game Reserve

	<u>1952</u>	<u>1953</u>	<u>1954</u>
Buffalo	6 - \$770.00	6 - \$635.00	5 - \$640.00
Elk		2 - \$230.50	1 - \$130.00
Buffalo Hides	5 - \$ 17.00	6 - \$ 43.50	
Buffalo Heads	2 - \$ 15.00		
Buffalo Head & Hide	1 - \$ 40.00		
Buffalo Horns		2 - \$ 4.00	
Elk Hide		1 - \$ 12.00	1 - \$ 4.00
	<hr/>	<hr/>	<hr/>
	\$842.00	\$925.00	\$774.00

GROUSE

During 1954 the best information we had pertaining to grouse population levels was that obtained from the spring and summer mail carrier surveys.

The spring mail carrier survey revealed that there was a drop in the breeding population in 1954 as compared to 1953. This also seemed to be the concensus of landowners within the grouse range.

Under our new reorganization plan, the game managers are inaugurating special grouse surveys which will give us better information pertaining to grouse population level trends.

PHEASANTS

Winter 1953-54

Rural mail carriers again helped us conduct a winter survey. Seven hundred (700) carriers covered a total of 142,603 miles during the four-day survey period. We appreciate the cooperation of the mail carriers. Insofar as we know at the present time, this survey gives us usable information relative to the number of cocks per hen in the winter population. During the winter of 1954-55 our game managers will be conducting surveys to test the winter mail carrier survey.

The number of cocks per hen in the winter population gives us some information pertaining to hunting pressure. Since we limit our hunting season to cocks, the heavier the hunting pressure, the fewer cocks remain per hen. Game managers in general believe that a winter ratio of 1 cock to 4 or 5 hens is a good ratio. On Pelee Island, Ontario, where they have unusually heavy pheasant populations, they cut their cocks down to the point where they leave 1 cock per 10 hens.

The mail carrier survey indicated a state-wide ratio of 1 cock per 1.09 hens. On a state-wide basis the conclusion is that the hunting pressure was very light. The eastern third of the state which receives the heaviest hunting pressure, because it includes our larger metropolitan centers, had a pheasant sex ratio of 1 cock per 1.6 hens. Here the hunting pressure was also light.

A 61% drop in the number of pheasants observed by mail carriers in 1954, as compared to 1953, is indicative of the reduced pheasant population.

Spring 1954

We used two methods to obtain information relative to the spring breeding population level -- crowing counts and mail carrier surveys. The advantage of using two methods is that one acts as a check upon the other.

These methods are designed primarily to indicate population trends -- they are not indicative of the actual size of the populations. We can determine whether the population is lower or higher than the previous year. Future refinements of these methods may enable us to determine the magnitude of the decline or increase, as the case may be.

The crowing count method indicated a 38% state-wide decrease in the breeding population from 1953 to 1954. The rural mail carrier survey indicated a 30% drop. It is significant that both methods indicated a lower breeding population in 1954 than in 1953.

The winter mail carrier survey gave us an idea relative to the number of cocks per hen in the winter population. We ran another survey during the spring breeding period to obtain additional information concerning the numbers of cocks per hen during the breeding period. From April to the end of May, Conservation Officers kept records of cock and hen groups. Cock pheasants do not mate with any one particular hen; they mate with several hens and these mating groups are called harems.

The Conservation Officers observed a total of 1,718 harems, and the average number of hens per cock was 1.64. This figure, like the winter sex ratio figure, also indicates that the hunting pressure on the cocks was relatively light and that there were more than enough

cocks present in the spring breeding population.

Summer 1954

Several types of surveys are employed to determine reproductive success -- rural mail carrier surveys, Conservation Officer sight records, brood counts by game managers, and the examination of pheasants bagged during the hunting season.

The rural mail carrier survey indicated a lower population level than in 1953. There was some indication that reproduction was better.

The Conservation Officer sight records (3,697 pheasants were recorded) indicated that reproductive success was about the same as in 1953.

The hunter bag checks revealed that 82% of the 1,144 pheasants examined in the field were young of the year, or 4.6 young were killed for every adult. This figure is slightly higher than the 8 year average and indicates rather good reproduction.

Fall 1954

For the first time we ran a fall roadside count survey to obtain information pertaining to the fall population levels. Since this was the first year for this type of a survey, we cannot compare the results to any previous years. Iowa has used this survey for many years, and we can compare our results with theirs. This count indicated an average of .47 birds per mile on a state-wide basis. Comparing this to Iowa figures, it indicates a rather low fall population level.

Summary

The spring breeding population was lower in 1954 than in 1953. Reproduction success was average or slightly above average. Summer and fall populations in 1954 were lower than in 1953.

Sex ratio information obtained during the winter, following the 1953 hunting season, and harem counts taken during the spring indicated that the 1953 hunting pressure was very light. Hunting pressure is not responsible for the decline in population levels.

Intensive Study of The Life History And Ecology of The Pheasant

During the latter part of 1954, we inaugurated a study aimed primarily at obtaining basic facts needed for successful management of our pheasants. Through earlier research, we have obtained a good idea of the general life requirements of pheasants. If we wanted to manage a

piece of land solely for the purpose of raising pheasants, we could do a good job of it by using the information we now have at hand. Management of land primarily for pheasants does not fit in with sound land use programs of our rapidly developing age of intensive farming.

Intensive farming is here to stay. Technological advancements in the land use field during the past few years indicate that we are on the road to very intensive farming. Much of the waste area, which in the past has been left for wildlife will be converted to crop producing land. In view of this trend, it seems likely that any habitat management for pheasants in the intensive farming picture will be limited.

It is important that we have some knowledge of the minimum habitat requirements of pheasants and how these minimum requirements can be integrated into an economically sound land use program. The future of public hunting of pheasants depends upon the solution of this problem. What we put on the land for pheasants will be limited; we must be sure it is effective.

Another of our primary objectives is to determine the effectiveness of a pheasant release program and the most effective methods of stocking. We will be experimenting with fall releases of adult cocks, spring releases of mature brood hens, and summer releases of immature birds. By which method will we produce the best results?

As a place to carry on this work, three study areas have been established in Clay and Fillmore counties. This portion of the state was chosen for three reasons. First, it is in good pheasant range - this is necessary to insure a good supply of birds with which to work. Second, considerable hunting is done in these counties - providing a means of recovering marked birds and giving the investigators a chance to measure the effects of hunting. Third, fairly large tracts of state-owned land are located there and serve as nuclei of two of the study areas.

Each of the three study areas occupies about 9 square miles. The first is located near Harvard, and includes the Old Harvard Air Base. Here, various methods of stocking both game farm and wild-trapped pheasants will be tested, and several techniques of releasing will be checked to learn how the birds can best become adapted to their new surroundings. As each experiment is conducted, the total pheasant population of the area (including native and stocked birds) will be followed closely to determine the net effect of each particular releasing technique or stocking method on the population. This way, each method can be evaluated in terms of pheasant increases.

The second area is similarly located around the old Fairmont Air Base. Here, populations will be followed so that the effects on pheasants of changing land use can be learned. Land uses to be analyzed will include various arrangements of crops, the use of fertilizers, and the inclusion of waste areas, weedy fence rows, and specially planted

plots to provide cover. Working closely with the Soil Conservation Service and the State Agricultural College, attempts will be made to work out new farming practices which will benefit both farmers and pheasants.

The third area, located 5 miles north of Edgar, will be used as a check or control area. Following the pheasant population on this area will reveal whether or not fluctuations on the other two areas occurred as a result of the stocking or habitat manipulation or occurred naturally.

Preliminary stages in the study have been completed. A cooperative agreement has been drawn up and signatures of nearly all of the land operators involved have been secured. Base maps and maps of existing cover and crops have been made for each area. Preliminary pheasant counts have been conducted on the three areas to determine comparability of the pheasant populations. Equipment for the study has been obtained and trapping and banding of pheasants is beginning.

Much of the equipment is of a special nature. An example of this is the trapping equipment, which consists of a truck rigged with floodlights and spotlights and manned by a team of three to five men. The design of the equipment and procedure used in this type of trapping was patterned after that of South Dakota biologists who perfected it and have used it with success.

The technique to be used for marking the birds (numbered plastic markers) was developed by English researchers, and was first used successfully on quail in the United States about a year ago by the investigators assigned to our project. This technique is expected to be fully as successful when adapted for use on pheasants.

In a few months, two of the external signs of the field work will be noticed. First, pheasants will be wearing the numbered plastic markers indicating that they have been handled in the field and are supplying data. We will be anxious to be notified of the date, location, and identification number of each marked bird seen. Second, the presence on the three study areas of signs designating them as "Wildlife Research Areas" with "Hunting by Permission Only". This is where the sportsman enters in. He must contact the farmers for permission and instructions before any hunting is done on the land. We must know how many hunters go on the areas and how much game comes off. The sportsman's cooperation is imperative to the success of the study.

We are now ready to start the job in the field — recording changes in the various food sources and cover types, making notes on the sex, age, weight, etc., of individual pheasants, measuring movements of birds, nest success, survival of young, and hundreds of other phases of the pheasant's private life.

1954 PHEASANT RELEASE

<u>County</u>	<u>Breeder Release</u>	<u>Booster Unit</u>	<u>Game Farm</u>	<u>Total</u>
Antelope	176	332	1980	2488
Blaine	240	-	--	240
Cedar	-	-	200	200
Cherry	195	330	280	805
Cheyenne	-	-	40	40
Colfax	-	-	542	542
Dakota	86	290	300	676
Dawes	-	420	439	859
Dixon	90	-	--	90
Dodge	-	-	540	540
Holt	-	-	300	300
Lincoln	-	546	400	946
Madison	123	65	2125	2313
Morrill	-	648	600	1248
Nance	-	-	300	300
Pierce	287	389	1970	2646
Platte	-	-	600	600
Saunders	-	-	340	340
Scotts Bluff	-	257	220	477
Sheridan	-	500	540	1040
Stanton	64	149	919	1132
Wayne	96	200	300	596
<hr/>				
	1,357	4,126	12,935	18,418
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1953	1,456	4,801	9,002	15,259
1952	1,182	5,451	10,374	17,007
1951	1,190	6,997	9,309	17,496
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Cost Per Bird Released --		1954	\$2.05	
		1953	\$2.18	
		1952	\$2.12	
		1951	\$2.00	

PHEASANT BOOSTER UNITS

<u>County</u>	<u>Town and Representative</u>	<u>1953</u>		<u>1954</u>	
		<u>Started</u>	<u>Released</u>	<u>Started</u>	<u>Released</u>
Brown	Ainsworth	750	570	--	--
	A. D. Austin				
Cedar	Randolph	--	--	300	268
	Gale Bleasdel				
Cherry	Cody	450	280	350	330
	Allen McCarroll				
Cherry	Valentine	2110	1140	--	--
	Harold Jordan				
Dakota	South Sioux City	300	261	300	290
	Dale E. Voss, Jr.				
Dawes	Chadron	600	480	450	420
	Al Lecher				
Holt	Atkinson	340	--	300	--
	Willard Linville				
Holt	Page	150	103	--	--
	Ray A. Snell				
Lincoln	North Platte	--	--	600	546
	Max Von Goetz				
Madison	Norfolk	--	--	300	293
	Herb Lau				
Morrill	Bayard	290	130	150	127
	Frank Smith				
Morrill	Bridgeport	650	330	600	521
	Jack Hoke				
Pierce	Plainview	360	217	300	282
	Ted Buerkle				
Pierce	Brunswick	--	--	300	292
	R. R. Richardson				
Rock	Bassett	360	160	--	--
	Cliff Turpin				
Scotts Bluff	Scottsbluff	340	150	300	257
	Bob Saathoff				
Sheridan	Rushville	850	490	600	500
	Bill Hewitt				
Sheridan	Gordon	750	490	--	--
	Bill Davis				
		<hr/>	<hr/>	<hr/>	<hr/>
		8,300	4,801	4,850	4,126

QUAIL

The mid-summer bobwhite survey of whistling males, conducted by conservation officers and technicians, indicated an appreciable improvement over 1953, both in the size and distribution of the population.

Mail carriers' records indicated little change in the spring counts from 1953, and a somewhat lower figure for the summer counts.

Hunting season data reflected the improvements indicated by the mid-summer whistle count data. The rate at which hunters flushed coveys and bagged birds was better than 1953 and similar to 1952. Age ratios obtained from wings indicated 84% were young.

Hunters averaged nearly 19 hours per field in 1954; over 5 hours more than in 1953. On the average, they bagged a bird for each hour and twenty-five minutes of hunting time, and flushed a covey for each hour and thirty-three minutes of hunting time. They took an average of $1\frac{1}{2}$ birds for each covey flushed.

GAME FARM PERMITS

During 1954, a total of 388 game farm permits were issued, as compared to 364 during 1953. Revenue from these permits to keep protected species of wildlife in captivity totaled \$939.00 as compared to \$805.00 the previous year.

SCIENTIFIC PERMITS

The laws provide that permits may be issued accredited persons to take for scientific or educational purposes only, protected species of wildlife. Only 22 such permits were issued in 1954 and 1953, as compared to 23 in 1952 and 34 in 1951.

HUNTING SEASON DATES

	<u>1952</u>	<u>1953</u>	<u>1954</u>
Dove	Sep. 1-Sep. 30		
Grouse	Oct. 11-Oct. 15	Oct. 10-Oct. 15	- - -
Waterfowl	Oct. 11-Dec. 9	Oct. 16-Dec. 14	Oct. 8-Dec. 6
Pheasant	Oct. 17-Nov. 23	Oct. 24-Nov. 30	Oct. 16-Oct. 25
Quail	Nov. 1-Nov. 23	Nov. 1-Nov. 26	Oct. 30-Nov. 25
Rabbit	Apr. 1-Jan. 31	Apr. 1-Jan. 31	Apr. 1-Jan. 31
Squirrel	Oct. 1-Dec. 31	Oct. 1-Dec. 31	Oct. 1-Dec. 31
Opossum	Jan. 1-Dec. 31	Jan. 1-Dec. 31	Aug. 1-Mar. 31
Raccoon	Jan. 1-Dec. 31	Jan. 1-Dec. 31	Aug. 1-Mar. 31
Antelope	- - -	Sep. 14-Sep. 18	Sep. 11-Sep. 13
Deer	Dec. 1-Dec. 14	Dec. 1-Dec. 11	Dec. 4-Dec. 15

PITTMAN-ROBERTSON

Two Pittman-Robertson Investigational Projects were authorized for the 1954-55 fiscal year. One of these projects (Wildlife Survey and Investigations) includes the jobs for which our five district game managers are responsible. The other project (An Intensive Study of the Life History and Ecology of the Pheasant in Nebraska) is being carried on by two game technicians who work as a team. The various jobs follow.

- Job #1 - White-tailed and Mule Deer Inventory -- To develop techniques that will enable us to determine population trends and reproductive success.
- Job #2 - Collection and Analysis of Deer Harvest Data -- To obtain information pertaining to number harvested, age composition, general physical condition, and location of kill.
- Job #3 - Seasonal Food Habits of Deer -- To obtain information pertaining to seasonal food preferences, key browse species, and degree of range utilization by deer.
- Job #4 - Distribution and Seasonal Movements of Deer -- To obtain information pertaining to the state-wide distribution and daily and seasonal activities of mule and white-tailed deer.
- Job #5 - Antelope Inventory -- To inaugurate techniques that will reveal population trends and determine reproductive success.
- Job #6 - Collection and Analysis of Antelope Harvest Data -- To obtain information pertaining to number harvested, age composition, general physical condition, and location of kill.
- Job #7 - Waterfowl Breeding Population Surveys -- To determine the size and trend of the breeding population, its species composition, and relation to the available habitat.
- Job #8 - Waterfowl Production Surveys -- To determine the production success of the breeding population and the approximate number of ducks that will enter the Flyway population.
- Job #9 - Waterfowl Banding -- To obtain information relative to population movements, mortality rates, time patterns, production, and life history of waterfowl in Nebraska, and the relationship of Nebraska waterfowl to the Central Flyway population.
- Job #10 - Population Movements of Waterfowl -- To determine the seasonal population peaks of each species in the various parts of the state. Special emphasis to be placed on the fall migration.

- Job #11 - Hunter Kill Survey (Waterfowl) -- To determine the size and species composition of the waterfowl harvest.
- Job #12 - Refinement of Aerial Method of Determining Habitat and Waterfowl Breeding Population Relationships -- Refinement of the aerial photography method of measuring waterfowl populations through a knowledge of available habitat.
- Job #13 - Investigation of Lead Poisoning Losses of Waterfowl -- To determine extent of losses in 1955, relationship of losses to water level, availability of lead shot, and other information that can be learned through handling the birds and band recoveries.
- Job #14 - Spring Grouse Inventory -- To determine breeding population trends.
- Job #15 - Grouse Brood Studies -- To determine reproductive success.
- Job #16 - Annual Fur Harvest Inventory -- To determine annual state-wide fur harvest.
- Job #17 - Muskrat Population Fluctuations -- To obtain a better understanding of annual and long-term cyclic fluctuations and their management implications.
- Job #18 - Age and Sex Ratio Studies of Fur Bearing Animals -- To determine reproductive success and population composition.
- Job #19 - Rural Mail Carrier Survey (Summer) -- To obtain extensive data pertaining to population trends.
- Job #20 - Rural Mail Carrier Survey (Winter) -- To obtain extensive data pertaining to post hunting season sex ratios and population trends.
- Job #21 - Rural Mail Carrier Survey (Spring) -- To obtain extensive data pertaining to breeding population trends to be used in conjunction with other inventory methods.
- Job #22 -
- Job #23 - Field Bag Check of Pheasants -- To obtain information pertaining to age, age ratios, and hunting success. This information will serve as a check on our summer data.

- Job #24 - Pheasant Brood Studies -- To follow trends in reproductive success.
- Job #25 - Pheasant Crowing Count Census (1955) -- To determine pheasant breeding population trends.
- Job #26 - Initiate Study of Effects of Insecticides and Herbicides Upon Upland Game With Special Emphasis Upon Upland Game Birds -- To develop plans for a study of the indirect and direct effects of insecticides and herbicides upon upland game with special emphasis upon upland game birds.
- Job #27 - Pheasant Roadside Count (Spring) -- To determine breeding population trends.
- Job #28 - Winter Sex Ratios of Pheasants -- To obtain information pertaining to hunting pressure and information needed for interpretation of breeding population data.
- Job #29 - Preseason Inventory of Bobwhite Quail -- To determine population trends and population levels.
- Job #30 - Collection and Analysis of Quail Harvest Data -- To determine hunting success and obtain other data pertinent to the hunting season; to determine sex and age ratios of bagged birds, and hatching dates of previous summer.
- Job #31 - Winter Check of Bobwhite Quail Populations on Selected Areas -- To determine welfare of quail through the winter period.
- Job #32 - Wildlife Survey Through Wildlife Reporters -- To obtain information on local wildlife populations, local conditions, and nesting success.
- Job #33 - Analysis of Scats, Stomachs, Crops, Pellets, and Gizzards -- To add to accumulating information pertaining to food habits of game birds, furbearers, and predators.
- Job #34 - Publication of Results of the Muskrat Studies -- Preparation of a popular muskrat management and trappers' bulletin for general distribution.
- Job #35 - Pheasant Bulletin -- To publish pheasant bulletin based upon all data collected to date in Nebraska.

An Intensive Study of the Life History
and Ecology of the Pheasant in Nebraska

- Job #1 - Establishment of Study Areas — To establish three study areas in good pheasant range of the state.
- Job #2 - Preparation of Study Area Maps — To construct base maps of the three study areas to be used as work sheets for various phases of the study.
- Job #3 - Cover Mapping of Study Areas — To prepare cover maps of the three study areas, from which changes in vegetation that may influence pheasant populations can be analyzed. These maps will constitute records for qualitative comparison of the three areas as pheasant habitat, and will serve to trace any changes in land use on the areas during the study.
- Job #4 - Cover Type Preferences — To obtain information pertaining to cover type preferences to serve as a guide in planning the habitat manipulation phase of the project.
- Job #5 - Population Inventories — To obtain information pertaining to population trends and population composition.
- Job #6 - Studies of the Daily and Seasonal Movements — To obtain information pertaining to the extent of movements and factors influencing movements.
- Job #7 - Experimentation With and Development of Methods of Live-Trapping — To determine practical methods of trapping adult and young wild pheasants.
- Job #8 - Restocking as a Tool in Pheasant Management — To obtain information pertaining to the role restocking plays in pheasant management and information pertaining to the relative merits of game farm and wild-trapped birds, insofar as restocking is concerned.
- Job #9 - Productivity Studies — To obtain information pertaining to nesting success and brood survival.

1954 PUBLIC APPEARANCES

	<u>Times Appeared</u>	<u>Number In Attendance</u>
S. E. Ling	1	100
Hank Sather	9	850
George Schildman	2	65

(continued on next page)

(1954 Public Appearances, Cont'd)

Dan Heyl	1	100-plus
Harvey Miller	8	865
L. P. Vance	14	2740
Levi Mohler	1	200
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	36	4920-plus

OUTGOING MAIL

Game	13,618 pieces
Federal Aid	10,971 pieces *
	<hr/>
	24,589 pieces

* Incomplete Record

INFORMATION AND EDUCATION

Introduction

Mr. Dick Schaffer, former Supervisor of the Information and Education Division, resigned early in the year to accept a position with an eastern oil company. Mr. Wallace Green, a graduate of Iowa State with majors in Wildlife Management and Journalism, was employed to fill this vacancy.

The Information Division is the smallest of the seven in the Nebraska Game Commission. The Division is charged with the responsibilities of:

1. Informing the Nebraska public of the current activities of the Game Commission.
2. Providing information to make the people of Nebraska aware of the needs and means of conservation of wildlife and other resources.

The staff of this Division consists of a Supervisor, an Artist-Exhibitor, a secretary and two circulation clerks. One of the circulation clerks spends much of her time operating the mimeograph machine for all divisions.

Correspondence

This Division is responsible for answering all routine correspondence concerning inquiries of a semi-technical nature. These inquiries are answered by dictated letters, supplemented by mailing one or more publications of the Nebraska Game Commission. Some letters come to this office that are forwarded to proper governmental offices, as some people are unaware of the proper functions of the Nebraska Game Commission.

Publications sent from this office are: Fishing Regulations, Hunting Regulations, Boating Regulations, Outdoor Nebraska Magazine, and Arbor Lodge Booklet (25¢ plus 5¢ mailing charges). In past years the following publications were also sent out: Nebraska Fishing Waters, Recreation Guide, Outdoor Nebraska Map and Trapper's Guide. These are now out of print. Revision is anticipated on some of them for publication in 1955.

A tally, beginning in April, 1954, of outgoing single pieces of correspondence reveals that this Division mailed 40,036 individual pieces during the last three quarters of 1954. The 40,036 includes about 20,000 pieces of correspondence other than answers to inquiries from the public. These are such items as wildlife club news, mailing of departmental news letter, magazine receipts, subscription letters, etc. If the nine-month figure is pro-rated out on an annual basis, the total mailings by this office would be over 53,000 items. An estimated 18,000 to 20,000 of these mailings were in answer to inquiries from the public.

News Service

Release of news of the departmental activities was accomplished by issuing a weekly press release to newspapers, radio and TV stations throughout Nebraska. These releases were mailed to 587 addresses each week and averaged three to four pages in length. There was a total of 40,820 copies mailed in 1954.

An important and little noticed means of releasing news to the public is via wire services. This Division released over 20 stories to the national press services, (United Press and Associated Press) in 1954. This assures complete statewide coverage in a matter of hours after the release has been made. This also gives each publisher in the State an even break on the story. Releases of this kind lead some people to believe that the information is not made by this Division, but actually the source of the story is from here.

"Outdoor Nebraska" column was not mailed to any newspapers in 1954, due to a period of adjustment by a new Supervisor. It will be started in 1955.

Another weekly news release was the fishing round-up, which averaged two pages and was sent to 42 sportscasters and seven Commissioners. It was issued for a period of 20 weeks, totalling 980 copies.

Public Service Programs

Besides assisting personnel from other divisions on program arrangements, personnel from this Division presented 14 programs of all types at public gatherings in 1954.

Exhibits

The main exhibit prepared by the Division was the State Fair Exhibit. The format of the exhibit was planned around display, rather than wild animals, as it had been the two previous years. Profiting by the past exhibits, it appears as if a blending of both display and wild animals is the best type of exhibit for the State Fair.

Conservation Camp

The annual State Conservation Camp was held in Chadron in co-operation with the 4-H Club. This Division aided in scheduling speakers and other participants. Attendance was open to over 300 outstanding 4-H club members from all parts of Nebraska.

Exchange Magazine and News Release Library

This Division maintains a library containing magazines and news releases from conservation departments in 38 states. They are received on an exchange basis and the material is available to all departmental personnel.

Outdoor Nebraska Magazine

This magazine is prepared and edited by this Division. Circulation is supervised from this Division and is handled by the publisher.

New subscriptions for 1954 were lower than 1953 and totalled 2,568. Of this total, 933 were for one year, 1,259 were for two years and 376 were for five years.

Renewals were higher than in 1953 and totalled 2,703.

There are two reasons for the drop in new subscriptions. First, subscription letters sent out to permit buyers were discontinued in January, 1954.

The second reason is reflected by a lower number of public programs scheduled by this Division and others. In 1953, the Commission purchased a fifty-minute film entitled "Bob White Quail." The policy of only allowing Commission personnel to show the film the first year provided a tremendous opportunity to sell subscriptions to the public. Apparently the summation of these two factors account for a drop of 3,223 in new subscriptions.

There were 107 newsstand accounts that were consigned 7,062 copies of the magazine during 1954. They returned 1,156 for a total sold of 5,906 on newsstand accounts. No figures are available at this time to indicate the returned magazines in 1953.

Total cash receipts for subscriptions and newsstand sales were \$6,255.73.

Bulk Mailings

Hunting-Trapping Regulations	230,000	1,144 permit accounts
Fishing Regulations	230,000	1,144 permit accounts
Boating Regulations	13,000	To specific permit accts.
Game Law Books	1,200	Mailed only on request

Mimeographing

This Division does all of the mimeographing work needed by all the Divisions of the Game Commission. A tally, begun in April, 1954, indicated over 225,000 pieces of mimeographing material were prepared in this office in a nine-month period. Pro-rated out on an annual basis, the total would be over 300,000 pieces.

Radio and Television Programs

Paul Gilbert presented 52 radio programs, recorded on tape and sent to 19 different radio stations. A series of Saturday morning TV programs was started and six were presented by the end of 1954. These half-hour TV shows are aimed at the children in the viewing audience and the response to the program has been encouraging. This program is carried over KUON-TV at Lincoln. Another cooperative bi-monthly television show is programmed by KHOL-TV near Holdrege through the cooperation of the Ft. Kearney Wildlife Club, the Game Commission and the station.

None of the Commission personnel, including Mr. Gilbert, receive compensation for these programs and the time for such programs is furnished without charge by the cooperating stations. All other public relations programs are also presented without cost.

Moving Pictures

The Game Commission has film distributed by the Audio-Visual Aids Department of the University of Nebraska. They, in turn, extend film service to all groups and individuals desiring such films at minimum rental. A list of these films may be obtained by writing to the above Department at the University, or to the Nebraska Game, Forestation and Parks Commission, State House, Lincoln, Nebraska.

Youth Education Programs

The Department also cooperated with active conservation programs of the Future Farmers, Boys of Woodcraft, and the Izaak Walton League, as well as the extensive "Conservation Good Turn" of the Boy Scouts of America.

The State Superintendent of Public Instruction, through his office of Conservation Education supervised by Mr. George Rotter, prepared and distributed several publications on conservation to all schools of the State. The Game Commission assisted in a small way with this preparation.

The Nebraska Game, Forestation and Parks Commission encourages all individuals and clubs to participate in youth programs of any kind. The small investments now being made in the promotion of youth conservation projects indicates results so successful that it is obvious more activity in this field of endeavor will pay unbelievable dividends in countering juvenile delinquency problems.

LAND MANAGEMENT DIVISION

by Jack D. Strain

INTRODUCTION

The Land Management Division was charged with the operation and maintenance of most of the lands owned and operated by the Commission until the District Management Plan was inaugurated on September 1, 1954. After that date, maintenance, excepting State Parks and the Reservoir Areas, was charged to the Construction and Engineering Division and the Land Management Division assumed administration of the Habitat Restoration program under federal aid to wildlife.

Under the District Management program, the Division administers the seven State Parks, the Habitat Restoration Program, and the Reservoir Management section.

In addition, the Division is responsible for the commission and administration of numerous land use and concession leases and permits on the state recreation areas, liaison with appropriate federal agencies as directed by the Commission, investigation and analysis of recreational potentials of proposed state and federal projects, and cooperative endeavor with other Commission divisions.

DIVISION ACTIVITIES

A. Administration

The administration section is manned by one supervisor. Stenographic and clerical work is accomplished by a Steno Clerk III who serves the same function for the Enforcement Supervisor. This section is responsible for administration of division programs, supervision of division field personnel, maintenance of records and reports, correspondence, etc. pertinent to the division.

As examples of routine activities, the supervisor: originated 1359 pieces of mail during the year, 1185 of which were first class; issued seven special reports to the Commission and twenty-one general operational directives to field personnel; spent 116 days in the field, an average of 9.6 days per month or about 35% of the working time; attended staff and Commission meetings as held; made nine public speaking appearances; submitted twelve monthly activity reports; and made five arrests and convictions for Game Law violations.

The supervisor visited all the state parks a number of times, and inspected many of the state recreation grounds. All field personnel were contacted.

B. District Crews

In 1953 the forestry crew and west-end crew were reshuffled into four district crews. These crews operated from Gering, North Platte, Grand Island, and Fremont and each crew was responsible for the areas within it's district, about twelve in most instances.

On September 1, 1954, these crews were disbanded and the more qualified men were absorbed into the new overall district program, most of them going into the Operations section.

Reports of the crew foremen on their activities for the permit January 1 to September 1, 1954 follow:

Crew No. 1

FOREMAN: Lem Hewitt

HEADQUARTERS: Gering

Wildcat Hills Big Game Refuge

The big game reserve fence was patrolled several times during this season, old deteriorated and unsafe posts were removed and replaced the season past, this season all remaining posts were restapled and tested for soundness.

Approximately sixty tons of about equal amounts of alfalfa and wild hay was stock piled in the cabin area for use as feed for the animals in the reserve, this amount of hay being sufficient for two years feeding, along with a supplemental feeding of two tons of 20% corn and cotton cake pellets each winter. New salt and mineral boxes were made and placed in the pasture, steamed bone meal and salt are kept in these boxes at all times. The hay used in the feeding operations is obtained from State owned areas, usually harvested on a crop contract basis by nearby ranchers on a 50-50 proposition and at a considerable saving to the Game Commission, rather than having to buy hay on the open market.

Of twelve calves born into the buffalo herd in the past two years, eleven were bulls, with one lone cow calf, six of these animals will be removed from the herd and disposed of through Game Administration channels to various clubs and organizations that wish to have buffalo feeds, barbecues, etc. Thinning of the herd is necessary to prevent over grazing of available range land. After removal of six animals, the herd will consist of eight adult cows, one cow calf, five bull calves, and five adult bulls. The elk herd consists of two adult bulls, seven cows, and four calves, one adult bull having been disposed of as were the excess buffalo.

Wildcat Hills Recreation Area

The area was serviced numerous times during the summer, bottles and cans picked up and disposed of. Once during the summer a Boy Scout Troop from Gering came out and really did a bang-up job on the cans and bottles detail. Fireplaces in the large shelter house were repaired, twenty-three picnic tables were painted and repaired, all the toilets were painted, the roofs were given a preservative coat, one shelter house from which the roof had been burned, was readied for a new steel roof. A new high fence was built around the large entry-way gates, which were also painted. The roads were dragged several times, rotted off guard rail posts were removed and piled at the various fireplaces, hydrants were repaired, the ten thousand gallon reservoir was filled five times. A fourth wire was added to the north line fence. The old trash dump was completely covered and a new dump established in an area removed from the recreation area.

Bridgeport Lakes Area

This is a new area, comprised of a series of sand pit lakes, acquired by the Game Commission recently, sufficient land is in the area to provide generous recreation and picnicking facilities, which has been supplied with six new picnic tables, two toilets, three two unit fireplaces. Plans are underway to install wells, road improvements, tree trimming, and trash removal, etc.

Walgren Lake

The area was mowed four times during the summer, trash picked up and removed, picnic tables repaired, toilets repaired, fences patrolled and repaired, roads dragged, and a road improvement plan is underway.

Pine Ridge Deer Refuges

The Gilbert-Baker place fences were patrolled and repaired, the two car auto gate at the north end of the area was cleaned several times.

Smith Lake

Approximately seventy-two tons of hay was harvested at this area, half of which is to be hauled to the Wildcat Hills Big Game Refuge for winter feeding of the animals within the refuge.

The large rustic 'Smith Lake' sign was moved from the north entrance to the south entrance bordering the State Hi-way. The weeds and grass were mowed three times during the summer. New steel gates were put at each end of the dam to prevent traffic across the dam. The sand roads were hayed several times. Around the lake traffic has been directed, at one point, through private property. This situation has been corrected by the construction of a fill across marshy spots within the area. A tube has been installed and around the lake traffic may now travel the distance on a state owned and maintained road.

Shell Lake

The area here requires little attention; however, the roads were mowed three times during the summer, the fences were patrolled and repaired and a cattle guard at the entrance was cleaned three times.

Cottonwood Lake

New trash cans were supplied here, picnic tables repaired, grass and weeds mowed two times and fence repaired.

Ballards Marsh

This area was mowed three times, fire prevention signs placed, new trash cans installed, picnic tables repaired, cattle guard cleaned and fence patrolled and repaired.

Big Alkalai Lake

About one half mile of new fence was built, fencing off a fisherman's area, sand roads hayed, about one hundred fifty feet of fill was built across a marshy area on the south side at the cattle guard entrance. Another fill was built at the north entrance to the fisherman's area and a thirty inch by thirty foot tube installed at that point. The balance of the sand roads were hayed.

Schlagel Creek

About two miles of impassable sand roads were hayed through this area and made passable. Two bridges were repaired, a thirty inch by thirty foot tube was salvaged from the old hatchery area and removed to Big Alkalai Lake for installment there, old fence within the area was removed and the steel posts salvaged. The fence was patrolled and repaired.

Long Lake

This area was mowed four times, the fence was patrolled and repaired. Two cattle guards cleaned and repaired, a fence extending out into the lake was rebuilt and one new cattle guard was installed.

Crew No. 2

SUPERINTENDENT: Ed Cassell

HEADQUARTERS: McCook

SUB-HEADQUARTERS: North Platte

This report deals with the maintenance and development work of District No. 2 consisting of the recreation areas on Johnson Lake, Gallagher, Midway, Maloney, Sutherland, Ogallala Lake, North Shore, Otter Creek, Champion, Rock Creek, Hayes Lake and Wellfleet from January 1 to October 1, 1954.

This division had two full-time employees.

Summary of Major Activities

JANUARY: The trees were trimmed at Johnson Lake Area No. 1 and at Gallagher. A few days were spent in helping move cabin from Camp Hayes to McCook. Two loads of rock were hauled to Rock Creek to repair roads and the truck box was repaired and new sideboards were built.

FEBRUARY: We hauled 4 loads of rock to Rock Creek to repair roads, painted small warehouse building at North Platte, repaired wave breakers at Camp Hayes and installed new guard railposts at Camp Hayes. We also helped move garage to McCook, installed new trash cans at Maloney Lake, and had the motor repaired on big truck.

MARCH: Helped Lem Hewitt load several buildings at Camp Hayes and started salvaging barracks building at Camp Hayes. We sent a load of salvaged lumber to Fremont and took a load of used beds and boats to Chadron State Park.

APRIL: Finished salvaging building at Camp Hayes and also repaired the dam and regraded the road at Camp Hayes. We stored the lumber in a cabin on the area and hauled the remainder to barn at Stratton. Ballast was hauled from Trenton to reface dam and wave breakers were installed. Wood was sawed for fireplaces and the old irrigation ditch at Otter Creek was bulldozed.

MAY: Fallen limbs were cleaned up at Johnson Lake Areas No. 1 & No. 2 and trash was picked up and hauled from area. The recreation areas at Johnson Lake, Midway, Gallagher and Maloney were mowed. Old tractor was taken to Lincoln and a used one was brought back and mower was mounted, thus, first round of clean-up was started.

JUNE: A complete round of mowing, hauling trash, cleaning latrines and general clean-up in all areas.

JULY: Second round of general clean-up, mowing and trash hauling on all areas in the district.

AUGUST: The third round of general clean-up was completed. Roads at Johnson Lake No. 2 were repaired and parking area was rebuilt, also, new trash cans were installed at Johnson Lake No. 1 & No. 2 and Gallagher.

SEPTEMBER: New parking posts were installed at Johnson Lake Area No. 2. Wellhouse wells were drained for the winter and serviced for next year's use. The latrines at Johnson Lake and Maloney were repaired.

In October the new policy went into effect, thus relieving me of the administration of these areas.

Three hay contracts were administered at Hayes Lake, Wellfleet and Johnson Lake.

Crew No. 3
FOREMAN: Dallas Johnson
HEADQUARTERS: Grand Island

Arnold Lake Récreation Grounds

We mowed grass and weeds, graded roads, painted toilets and picnic tables. Also measured the hay and general clean-up.

Atkinson

We painted the toilets, mowed the area a number of times and general clean-up. Trimmed a few trees and graded roads.

Bowman Recreation Grounds

We painted toilets, picnic tables, benches. Mowed weeds and grass a number of times, trimmed trees and cleaned up dead timber, papers and cans, etc., and graded roads.

Cottonmill Lake Area

We painted tables and toilets, buzzed wood for fireplaces, mowed the grass and weeds and general clean-up. Trimmed a lot of trees and graded roads.

Crystal Lake

We mowed weeds and grass a number of times. Cleaned up dead trees and buzzed wood, graded roads, trimmed trees and general clean-up.

Goose Lake

Mowed weeds and grass

Hord Lake

We mowed weeds and grass, painted tables and toilets, graded roads and general clean-up.

Litchfield

Mowed weeds and grass, painted the tables and toilets, graded the roads and general clean-up.

Pibel Lake

We mowed and trimmed trees, buzzed wood for fireplaces, painted toilets, and general clean-up.

Pressey

We did a lot of mowing, over 30 days of trimming trees and cleaning up old logs. Buzzed a lot of wood for fireplaces. About 120 spools of new wire and nearly a carload of posts for pasture fence and partition lines, 680 rods of four wire bordering fence was built. Tanks were cleaned out and bottomed with clay dirt. Measured hay, did some well work on park pumps.

Ravenna

We mowed grass and weeds, painted toilets and tables, trimmed trees, graded roads, and general clean-up.

Hull

We mowed and cleaned up.

In May we went to Ogallala and planted 2000 trees at Otter Creek.

Crew No. 4

FOREMAN: Merl Johnson

HEADQUARTERS: Fremont

Fremont State Lakes.

This is probably the heaviest used area in District No. 4. Tables were repainted, and dead trees removed. Eight new trash barrels were installed. This area was mowed and policed regularly. A lot of time was spent cleaning up cans and bottles around the lakes.

Louisville Lakes

This area is probably the second heaviest used area. The major job was keeping it policed up. This area was mowed three times, tables and toilets were repaired. Thirteen new trash barrels were put on this area. The roads were maintained frequently by a county patrol.

Verdon State Lakes

This area was mowed three times and policed as necessary.

Alexandria State Lakes

Tables repaired and painted, mowed three times. Area was policed frequently. The roads were taken care of by a county patrol.

Blue River Recreation Grounds

Well was repaired, tables were repaired and painted. It was mowed three times and cleaned up area as necessary.

Memphis State Lake

Trees trimmed, firewood sawed for fireplaces. One well repaired. Reseeded about five acres of shore line with blue grass and mowed three times. Some dredging was done by the construction crew for duck nesting areas. The concessionaire kept the area policed and well maintained.

Dead Timber Recreation Grounds

This is probably the third heaviest used area. Trees were trimmed, firewood sawed, picnic tables painted and some road repair. Mowed and cleaned up area frequently.

Grove State Lake

This is a new Lake and a considerable amount of work was done by the Construction crew. About sixteen acres were seeded and hayed. All the necessary signs were installed and twelve new tables were set up and painted. Eight trash barrells were installed and the picnic area was cleaned up and mowed.

This crew also moved Officer Salak to O'Neill, delivered tractor and supplies to Niobrara State Park, and also assisted in spraying trees at Niobrara State Park.

The crew delivered to the Game Farm a panel truck and new tractor. They also helped tear down part of old mess hall at Hay Center Recreation Grounds.

C. Reservoir Crew

In May of 1952, the Commission executed an agreement with the United States Department of the Interior, Bureau of Reclamation for the management of the land and water surface areas of Medicine Creek and Enders Reservoirs. In April of 1954 a similar agreement was committed for Swanson Reservoir.

Under these agreements, the Commission is permitted to retain all income from the lands and concessions but is required to spend such monies back on Bureau impoundments. It is also required to accomplish such operation and maintenance as is required. A superintendent and two men are permanently employed to perform this function. In addition, necessary temporary labor is acquired during the peak season.

By executing the above noted agreements, the Commission has made available free hunting and fishing to the public on 14,760 acres of land and 8,539 surface acres of water at very little cost to the department.

In two and two thirds years of operation at Medicine Creek and Enders, and two thirds of one year's operation at Swanson Reservoir, the Commission has expended a total of \$59,334.34. During the same period, an income of \$51,516.93 was derived, the deficit amounting to \$7,817.41.

This deficit does not represent a true picture of income versus expenditures; however, as the expenditures include the initial outlay for trucks, tractors, and other equipment. It is believed that under

normal operating conditions, the program will pay it's way and realize a substantial profit that will be used to enhance the hunting, fishing, and other recreational facilities of the reservoirs for the public.

The following report by Mr. Edward Cassell of McCook, who very capably manages the three reservoir areas, summarizes the annual operations of this section.

Reservoir Management Crew

Activities of this crew encompass a full 12 months of activity and of a very diversified nature.

Winter months activities included such work as the moving of cabins from Camp Hayes to McCook for crew use, hauling of rocks to Enders for boat ramp protection, cutting of wood for public summer use, the salvaging of fence at Swanson and Harry Strunk Reservoirs, general clean-up and painting of signs. Administrative work of the Superintendent also included checking of crop yields on leased areas, issuance of agricultural leases, sale of hay and public contacts involving recreational leases and reservoir management problems.

Spring brought with it many additional duties such as preparation of equipment, removal of weeds, the planting of 18000 trees and shrubs at Swanson Reservoir and the construction of three fourths mile of fence at Swanson. Posts were delivered to tenant farmers on all three reservoirs, and the continuous program of tree cultivation was started on all areas. Administrative problems of leases, checking pasture use by tenants and related official meetings finished up the many spring duties.

Summer naturally brought an estimated 120,000 visitors to the three areas which of course resulted in the constant removal of trash and cleaning of latrines each week, and continuation of mowing operations on recreation areas as well as continued cultivation of tree plantings. The drought period brought with it a desperate need for irrigation of trees particularly at Enders and Harry Strunk Reservoirs, which in turn required the laying of 200 feet of 4 inch pipe and pump. Fires plagued the crew at this time at Medicine Creek Reservoir including 50 acres of grass and a private cabin, all due to lightning.

Other activities of the Superintendent and his crew during summer months included combine operations at Medicine Creek and Enders Reservoirs, division and sale of grain from leased areas, a detailed range survey, and survey of construction of roading at Swanson Lake. As mowing and cultivating continued throughout this period checks were made at the same time of existing game and fish conditions.

Fall completed the years activities of this crew with a rebuilding of the boat ramp at Medicine Creek Reservoir, clean-up of all areas, the rebuilding of one half mile of terrains, checking of all wells for winter,

repair of erosion at Enders swimming beach, and the checking of all pasture areas for removal of cattle before hunting season. The year closed with continued salvage of fence, construction of 1 mile of new fence and new terraces, and completion of division of crop receipts.

The activities of this crew are operated on a self sustaining basis, the income from agricultural and recreational leases enabling the Commission to further develop hunting, fishing, and recreational activities on the three areas.

Previous to the new district plan which removes the following responsibilities of the crew to another division, the reservoir manager also was in charge of development work on Johnson, Gallagher, Midway, Malony, Sutherland, Champion, Rock Creek, Hayes, and Wellfleet Lakes from January to October, 1954.

This work involved tree trimming, clean-up, mowing, new trash cans, latrine repairs, and new parking posts and road repair at Johnson Lake.

Cabins removed, wave breaker repair, new guard rails, barracks salvage, dam repair, and road grading at Camp Hayes.

At Rock Creek six loads of rock were brought in for lake and road improvement.

On all areas, general clean-up, moving trash, latrine clean-up and maintenance was accomplished.

Under the new district plan, it is anticipated that both the reclamation reservoirs and the tri-County chain will receive greater attention than has been possible with the double duty assignment of this crew to both water sheds.

D. District Land Managers

In the departmental district reorganization, five Land Managers were appointed, one to each district. These men were hired to carry out the existing habitat restoration program, to survey it's efficiency and results, analyze land use practices, and make pertinent recommendations that land owners may incorporate conservation practices into their operations that benefit fish and game species and at the same time increase or at least do not decrease land income.

These men are not intended to supplant Soil Conservation Service or County Extension people, but rather to do for the wildlife resource what these people do for the soil and water resources.

While the Land Managers coordinate with the Soil Conservation Service and County Agents, they work "hand in glove" with their counterparts in the Game and Fisheries Divisions as their activities are closely inter-related.

Direct supervision of the District Land Managers is accomplished through the project leader who is responsible for program direction, assimilation and dissemination of data, submission of progress reports, etc., and coordination of the program with other divisions at field and project leader level.

The Project Leader's position is competently administered by Wade H. Hamor, whose report follows:

Upland Game Restoration Project
Pittman-Robertson 17-D-8

The goals of this project were altered somewhat during the past year in an effort to provide more direct benefits to Nebraska's wildlife populations. The main effort of the project is still directed toward the restoration of woody cover to provide adequate winter protection for upland game birds. In addition to this, however, all types of cover, woody, weed and grass cover are being considered, saved and developed. It is quite evident that nesting cover is becoming a vital factor in our pheasant production picture. If nesting cover continues to disappear at the rate it has over the past few years, pheasant production as well as quail production is sure to drop noticeably. This project is, therefore, considering all types of cover and the efforts of the project are being directed toward proper and suitable development of this cover.

A new five district plan became a reality to this project on August 1 of this year when three men were hired as Land Managers and were assigned to districts. The nine labor crews, however, continued their duties of cultivation and fencing until October 30 of this year. The three men hired as of August 1 were Clarence E. Newton Jr., William J. Bailey, Jr., and Kenneth L. Johnson. Charles V. Bohart was appointed Land Manager from his former position of Assistant Project Leader. These assignments left a Land Manager vacancy in District #1. This position was filled when on December 23 Charles E. Keeler was interviewed and hired with his employment becoming effective January 1, 1955.

During the ten months of the year that the labor crews were working under the supervision of this project, the following development work was accomplished in 80 counties and involved:

1. Planting and cultivation of 262 wildlife areas requiring 728,220 trees and shrubs planted on 391 acres.
2. Planting and partial cultivation of 60,800 rods (190 miles) of multiflora rose fences on 310 farms which required 761,640 multiflora rose plants.
3. Construction of 9020 rods of three-strand barbed wire fence on 205 of the 1955 wildlife areas.

4. Delivery of planting stock to 304 farmers for replanting failed spaces in their multiflora rose fences and wildlife areas which required 115,400 plants.
5. Delivery of planting stock to 138 farmers and organizations wishing to establish their own multiflora rose fences and wildlife areas which required 251,793 plants.

Total amount of planting stock used in 1954: 1,857,053 plants
Total number of cooperating farmers: 1,014
Total number of new areas established: 710
Total amount of planting stock used by this project since its beginning in 1947: 7,417,222 plants.

The foremen of the labor crews accomplished some selection of 1955 planting sites during the latter part of their tenure under this project, but for the most part the new sites were selected by the Land Managers who commenced work August 1. As the year closes we find that the Land Managers actually contacted 442 farmers and inspected their farms with them for the purpose of advising on proper habitat development. Many of these farmers signed for planting sites for the coming Spring season. Approximately 3% of the farmer applications were rejected by the Land Managers because acceptable planting sites could not be found on their farms or the farmer could not give sufficient and adequate care to the planting had it been made.

All Soil Conservation Districts owning tree planters (59) were contacted to determine their interest in contracting to do the Project's tree and shrub plantings in their district in 1955. Of the 59, 15 replied in favor and two indicated they were getting away from the tree planting business. Forty-two did not reply. Sample contracts were then drawn up and presented to 12 Soil Conservation Districts in District #5 since this is where extra help during the planting season is most urgently needed in 1955. To date five contracts have been signed and two districts have rejected it for the same reason as stated above. Other states have used this method of tree planting successfully and it was decided to try it here experimentally. This plan may be continued if the tree survival rate, taken in the fall, proves equal to that of our own plantings. Theoretically, survival should be higher and cost of planting should be less. This, however, remains to be checked and proven.

A manual for the guidance of Land Managers was written and issued to all Land Managers. The purpose of the manual was to provide basic information on the many phases of the project, standardize procedures and increase the efficiency of the men in the field by answering many of the questions with which they come into daily contact.

During the latter half of the year, project personnel addressed 22 public groups interested in habitat restoration activities. The total attendance at these meetings amounted to 1809.

Sacramento Lake Development Project
Pittman-Robertson 23-D-3

Now that terracing operations are nearly completed on this area, it was possible to delineate field boundaries and make preparations for planting multiflora rose on these sites next spring. Approximately five miles multiflora rose boundary fences will be established on the newly constructed terraces. Such fences will divide the larger fields making them more suitable for the management of the game populations and insure that the leasees follow the contour in their farming operations.

In addition to the above, the following was accomplished:

1. Planted 5018 feet of dikes to brome grass to protect the slopes. This amounted to about 12 acres.
2. Planted approximately 12 acres in a fifty foot strip along the lake shore to Reed's canary grass, switch grass and tall wheat grass.
3. Completed another year of cultivation of existing tree plantings and multiflora rose fences. The conifers only will be cultivated next year. The growth and shading ability of the broadleaves have eliminated the need of further cultivation of these species.
4. Replanted waterways to alfalfa were necessary.
5. Continued terrace construction. At this date, 26 miles of terraces have been constructed. This leaves two miles to be done in the spring. The ground has been too hard to work which stopped terracing operations this fall.
6. Prepared the ground for about 5 miles of rose plantings.
7. Sowed wheat between some of the tree rows to reduce winter wind erosion. This will be cultivated out in the spring.
8. 15,500 trees and shrubs were planted and 600 seedlings were transplanted to new locations.
9. A general clean-up of old farm sites was carried out. Basements and silo pits were filled with rubbish then covered with dirt and leveled off.
10. Routine maintenance and repair of fences, signs and buildings was accomplished.

Fencing and Maintenance Project
Pittman-Robertson 27-M-1

This project was completed February 28, 1954. All wildlife areas established since 1947 were visited, the fences checked and repairs made as necessary. Fencing materials used included 559 posts and 82 spools of barbed wire.

Fence repairs varied from tightening wires to complete installation of all new fences. The latter occurred in those areas which were fenced in 1947 using untreated cedar posts. This project brought all wildlife area fences up to the "Good" classification.

The following reports are those of the district Land Managers, with the exception of District I where the manager was not appointed until January 1, 1955. Each Land Manager has an office in the Commission District Headquarters in the city noted.

District No. II

LAND MANAGER: Kenneth Johnson

HEADQUARTERS: Bassett

The District II Land Manager arrived in Nebraska August 1, 1954 and spent most of that month in becoming acquainted with the Commission policies and the job responsibilities. After this brief orientation, the writer moved to Bassett to assume the duties of Land Manager in District II. The activities since that time have been primarily concerned with the selection of planting sites for habitat development areas.

At the time of this writing, thirty development areas and one 1/2 mile multiflora rose planting, have been selected with some additional requests for areas yet to be checked. The following is a list, by species, of the trees and shrubs giving the estimates for the areas selected to date, and the allotments for the District.

Habitat Development Areas

<u>Species</u>	<u>Estimate</u>	<u>Allotment</u>
Multiflora Rose	26,868	31,000
Red Cedar	6,154	6,500
Russian Olive	4,589	6,000
Haneysuckle	2,250	6,200
Plum	9,257	9,100
Nanking Cherry	2,235	3,100
Sand Cherry	2,983	3,100
Chokecherry	5,799	6,200
Cotoneaster	3,198	3,100
Silverberry	2,566	3,100
Quailbush	4,792	3,100
Pine	751	1,500
Lilac	<u>1,828</u>	<u>1,500</u>
Total	73,270	83,500

Multiflora Rose Plantings

<u>Species</u>	<u>Estimate</u>	<u>Allotment</u>
Multiflora Rose	<u>2,500</u>	<u>12,000</u>
Total	2,500	12,00

Forty-two individual land owners have been contacted, including those that are to have habitat plantings under the 1955 quota. However, this does not include all contacts made concerning habitat work.

The meetings attended by the Land Manager include the Great Plains Habitat Conference in Hutchinson, Kansas, a talk made to the Bassett Grade School and two meetings at local Wildlife Clubs.

Assistance was given to research activities by being assigned to Big Game checking stations twenty days and pheasant bag checks 5 days.

In the way of a cover analysis of this District it can be stated that in the irrigated farm lands of the North Loup Valley, cover is quite limited due to the intensity of the farming practices, while in the more diversified farming area North of Highway 20 cover is fair. It is rather interesting to note that in the North Loup Valley there is a fair pheasant population while the area North of Highway 20 has a poor population. Pheasant cover within the sandhills proper is restricted to the creek bottoms, marshes, and other such limited places.

Grasslands, which make up the bulk of District II, are providing good to excellent cover for both species of Grouse.

District No. III

LAND MANAGER: William Bailey

HEADQUARTERS: Norfolk

The land manager for District III assumed duties with the Nebraska Game, Forestation and Parks Commission on August 1, 1954. The period of August 1 to August 24, 1954, was an indoctrination period during which time the writer became acquainted with Commission policies, the reorganization program, and the duties and responsibilities of the Land Manager's position. The land manager moved to Norfolk, Nebraska on August 24, 1954, to assume full responsibility for Land Management activities in District III. A brief time was spent accompanying planting crew foremen, Marvin G. Nelson and Elwin Hall, on a tour of their respective areas to become acquainted with vegetation, topography, geography, land use patterns, and wildlife development work in Northeast Nebraska. The remainder of the year was spent in (1) contacting landowners interested in wildlife developments, (2) preparing planting diagrams, (3) attending meetings of groups interested in Nebraska's Habitat Development program, and (4) cooperative work with the Game Division during pheasant and big game seasons.

Wildlife Planting Site Selection

Wildlife Areas

All wildlife areas that are to be planted by Game Commission Personnel in 1955 had been selected prior to the arrival of the land manager

in District III. The landowners on whose farms the wildlife areas are to be planted were contacted by the land manager; however, to check fall ground preparation of the sites and to prepare planting diagrams. Detailed planting diagrams, indicating the area, species, and amount of stock to be planted have been prepared for use by the Game Commission planting crews. The following is a break-down of wildlife areas that are to be planted in District III during the spring of 1955, and the estimated planting stock required.

<u>County</u>	<u>Number Areas</u>	<u>Number Plants</u>	<u>Acres</u>
Antelope	6	13,860	8.8
Boone	5	8,488	7.8
*Dixon	2	2,571	2.5
Greeley	6	8,207	5.95
Knox	2	4,185	3.8
Madison	3	3,707	2.85
Nance	3	5,208	5.0
Pierce	3	4,430	3.6
Platte	4	5,401	5.1
*Wheeler	<u>1</u>	<u>2,055</u>	<u>2.5</u>
	35	58,115	47.9

*To be planted by landowners

In addition to the thirty-five new wildlife areas, one 1954 area will be completely replanted. The area is approximately 1.5 acres in size and will require 1415 plants.

Estimated Planting Stock Required
For Wildlife Areas
(Includes Replant Area)

<u>Species</u>	<u>Number Plants</u>
Cedar	5,144
Multiflora Rose	25,235
Honeysuckle	7,374
Russian Olive	4,962
American Plum	6,670
Nanking Cherry	2,173
Sand Cherry	1,819
Black Cherry	591
Cotoneaster	1,319
Chokecherry	2,082
P. Pine	1,194
Ninebark	<u>944</u>
Total	59,507

Multiflora Rose Site Selection

Selection of multiflora rose planting sites for the 1955 planting season was begun September 16, 1954. The Land Manager was assisted in site selection by Elwin Hall, District III Operations Foreman, through October 7. Names of interested landowners were obtained from Soil Conservation Service personnel, land owners, Conservation Officers, and from personal contact.

At the time of this report, sites have been selected on the farms of eighty-one individual landowners. The following table indicates the number of plantings and estimated planting stock required by counties.

<u>1955 Multiflora Rose Plantings</u>		
<u>County</u>	<u>Number Plantings</u>	<u>Estimated Stock Required</u>
Boone	3	7,140
Cedar	5	10,555
Colfax	1	1,300
Cuming	23	67,570
*Dakota	2	7,300
Dixon	6	12,000
Dodge	7	33,165
Knox	1	1,200
Madison	1	2,600
Pierce	1	2,000
Platte	1	5,000
Stanton	13	40,090
*Washington	7	13,750
Wayne	<u>10</u>	<u>18,420</u>
Total	81	222,090

Additional site selection will be made subsequent to this report which will increase the number of plantings and the estimated planting stock indicated in the above table.

Evaluation of Cover Conditions in District III

The Land Manager cannot present a detailed evaluation of cover conditions in District III because of the diverse conditions encountered, the absence of quantitative and qualitative data, and the limited time the writer has been stationed in northeast Nebraska. Also, if the cover is to be evaluated, one would have to specify the species for which the evaluation is made.

Several conditions exist, however, that are apparent from general observations. In many of the intensely cultivated cropland areas of Wayne, Stanton, and Cuming counties, suitable nesting cover for the ring-neck pheasant is all but gone. The limited amount of nesting cover that

does occur is usually poorly interspersed among the extensive cornfields, so that nesting birds may be concentrated within relatively small areas. In the areas where this condition exists, it could be one of the factors conducive to low pheasant populations.

Winter and escape cover, either weedy or woody thickets, are also at a minimum in the intensely cultivated cropland regions. Landowners are often reluctant to establish permanent field division boundaries because of the continually shifting crop boundaries and acreages. This condition leads to a minimum of fence rows that would serve as suitable travel lanes for game species and makes it difficult to establish multi-flora rose travel lanes in areas other than along lanes and roads or along permanent line fences.

Most of the trees in shelterbelts and windbreaks of District III have grown beyond the stage of maximum benefits to wildlife. Many of these shelterbelts were not planted with rows of shrubs or coniferous species that would provide lasting ground cover to game species.

Practices Detrimental to Game Cover in District III

(1) Burning: Burning of fence rows, roadsides and railroad right-of-ways is one of the most widespread practices detrimental to game cover in Northeast Nebraska. Railroad right-of-ways have the potential of furnishing extensive game cover, if protected from burning in the intensely cultivated areas of the northeast.

(2) Grazing of shelterbelts: Grazing of shelterbelts does not seem to be a widespread practice in District III, although a limited amount does occur. Grazing decreases the value of the shelterbelt for wildlife cover by destroying the lower branches of the trees and the herbaceous ground cover. Many shelterbelts have been seeded to grasses or have been invaded by native grasses, offering potential nesting cover if protected from grazing.

Meetings Attended

Talks were delivered on Game Management and Nebraska's Habitat Development Program. Participated in programs with Elmer Carlson, Fish Manager, and Bob Benson, District Chief Conservation Officer.

A tour of wildlife plantings in Wayne and Stanton Counties was conducted for Cuming County landowners. Fourteen landowners attended. The tour was the most effective technique employed to date by the land manager in District III for arousing interest of landowners in Nebraska's Habitat Development Program. The writer also attended the Great Plains Habitat Conference (Sept. 27-29), in company with the Project Leader and District II Land Manager, at Hutchinson, Kansas.

Cocoperative Work With Game Division

In addition to the regular duties of Land Manager, the writer assisted the Game Division on several special assignments.

District No. IV

LAND MANAGER: Charles Bohart

HEADQUARTERS: North Platte

Although this report is included as an annual it covers only the last four months of the year. Actually, the Land Manager for this district moved into the District Office as of October 1 and has worked specifically in this area since that time. However, the majority of the work done during September was concerned with this District.

The District IV Land Manager is responsible for carrying out the activities of the Habitat Restoration Project in this district under the supervision of the Project Leader and the Supervisor of Land Management. These responsibilities and duties include the following:

1. Locate all planting sites within the District.
2. Make up planting diagrams on each site for use of the planting crew.
3. Evaluate cover conditions on each farm visited.
4. Supervise planting operations, distribution of fencing materials and planting stock, and fence salvage operations when required.
5. Maintain complete files containing locations of all plantings, signed agreements, receipts for material, correspondence and other records and reports pertinent to the project.
6. Provide immediate supervision for any other project under the jurisdiction of the Project Leader and assist other District personnel as directed by the Project Leader.
7. Serve in an advisory capacity to any individual or group of individuals or organization interested in promoting better habitat conditions for wildlife, and make personal appearances before interested organizations as required.

In carrying out the responsibilities of the restoration project, the following activities were accomplished during the report period:

I. Contacts with Land Operators and Other Individuals and Organization

Wildlife, regardless of the species, is a product of the land. In Nebraska the majority of the land is privately owned and activities which are intended to increase the production of wildlife must be carried on in cooperation with the land owners and operators. Cooperation with other agencies who are working with the land in various capacities must also be maintained. To further the objectives of the Habitat Restoration Project, 67 individual land owners were contacted during the report period. This is the number of initial contacts, that is, a second or third contact

with the same operator or owner has not been included. In addition, other meetings and contacts were made with individuals and organizations, scheduled and unscheduled.

II. Number of Planting Sites Obtained and Preparations for Establishment

From the 67 contacts, made with Land owners or operators, 58 agreements with new cooperators were signed. Five landowners who had previously signed agreements were contacted at their request and additional assistance was arranged. This makes a total of 63 sites in which development will be initiated or continued during the coming year. Four of these landowners will make their own developments with materials furnished by the Commission.

Planting diagrams, showing the estimated amount of stock, species, and location were made on 61 sites where they will be required by our planting crews or the landowner. These sites will require an estimated 95,761 plants. An evaluation of the habitat conditions has been made on 55 different farms in the district.

Additional work pertaining to the project includes the carrying on of correspondence, preparation of maps locating areas, both for the use of crews and as an office record. Arrangements have also been partially completed for the location of 3 planting-stock pools within the District to facilitate planting. Weekly reports were submitted to the Project Leader throughout the period covered.

III. Cooperative Efforts with the Game Division

During the report period a total of 22 days were spent working on assignment with the Game Division. September 10 through 14 was spent in Bridgeport operating a big game check station during antelope season. Two weekends, October 16-17 and 23-24, were spent making hunter bag checks for hunter success and age data information during pheasant season. December 2 through 16 was spent operating big game checking stations at Harrisburg and Ainsworth during the deer season. An additional three mornings were spent making roadside pheasant counts on September 18, 19, and 20.

IV. Other Activities

Other activities include writing three articles concerning land management and wildlife for the local newspaper and giving two programs showing slides of Nebraska wildlife and discussing habitat requirements. Also during this period residence was changed from Grand Island to North Platte and files and records were moved to and made up for, the Land Managers office at the District Headquarters. Equipment which was in service by our former field crews was inventoried and turned over to the District to which it had been assigned. Five days of vacation time were taken during the latter part of December.

V. Cover Conditions and Recommendations for Future Work

Type of terrain and land use directly affect cover conditions, quite frequently from one farm to another. The heavy alfalfa producing areas present different problems than those of wheat land, and dry land farming areas are different than the irrigated areas. For this reason it is difficult to make one statement suitable for cover conditions throughout District IV. However, it can be said that for the greater part, cover conditions not only are not as good as they should be, they are not as good as they could be. That is, cover conditions can be improved, this statement is made bearing in mind that improvements must be practical. Generally the two major cover requirements which are lacking are nesting cover and winter cover although quite frequently a lack of other cover requirements is indicated. On the 55 areas where existing cover conditions were evaluated, conditions ranged from very poor to quite good in a few cases. For the greater part, however, the cover conditions are such that the land is not carrying the wildlife population which it is capable of.

In addition to carrying on the Habitat Restoration Project as in the past, it is evident that more of this work needs to be done. Landowners are accepting the practices of pasture rotation to increase the carrying capacity of their land for cattle. Fertilizer is being used in larger amounts to increase the producing ability of fields. The carrying capacity of land for wildlife can be increased by providing the requirements for the species which we wish to benefit. To further accelerate the restoration of habitat it is imperative that we reach land owners and operators and assist them with technical knowledge. Practically any farm can be improved for wildlife, often by merely not doing something which had been done in the past.

In the relatively short time which this District Office has been operating, requests have been received from landowners asking that we visit their property to assist them in determining what they can do to improve their farm for wildlife. We must be able to supply them with information and materials such as cover planting stock and seed when it is required.

District No. V
LAND MANAGER: Clarence Newton
HEADQUARTERS: Lincoln

New to the state and this assignment, this land manager is looking forward to the work ahead in cooperation with his fellow associates. However, in the short period of the existence of this project, considerable good work has been laid for future activities.

The summer months were spent in orientation in office and field, becoming acquainted with procedures, policies, and cooperative habitat plantings with department and Soil Conservation Service personnel.

The fall months included the checking of primary selected planting sites for planting starts required, as well as work at the Gering checking station during the Antelope season and other game surveys on a co-operative basis with the Game Division.

Cover Conditions

A look at the picture of cover conditions in District V shows that the removal of the Osage orange hedges continues at a high rate. It is known that the hedges are of particular importance to quail as travel lanes and that they are used by other game species and beneficial song birds as well. At the present time it seems highly important to continue the multiflora rose planting program to establish a replacement for the cover lost by the removal of the hedge. However, the rose fences have one objectionable characteristic in common with the Osage orange hedge. That is under certain conditions they will dump snow into roads. It is recommended that generally the roses not be planted in close proximity to the north or west sides of any road that must be traveled in the winter.

Federal Government restrictions on acreage of corn have encouraged the farmers' use of various sorghums. Limited observations indicate that the pheasant uses these sorghums as much or more than an equal amount of corn. The further reduction of wheat allotments for the 1955 harvest has resulted in the farmers leaving some wheat stubble that would have been turned under. Thus there has been an increase in roosting cover over last year.

In line with the practice of establishing nesting sanctuaries, it is suggested that additional species of planting stock be included in the program. It is felt that some land operators could be encouraged to set small plots of land aside for the purpose of Christmas tree production. Those species of conifers which are best suited for Christmas trees may be too slow in growth to provide a great deal of cover, but the planting would provide an area undisturbed for nesting and loafing. Plantings of walnut could be used to the same end. These species would be applied in small numbers of twenty-five to fifty to a planting. At this time no land operators have been approached on this subject. Any allotment of stock should be restricted to numbers in line with an experimental basis.

Summary

Accomplishments under the Upland Game Habitat Restoration Project may be totaled as follows:

Land operators contacted.....	128
Rose planting sites selected.....	61
Wildlife habitat areas selected....	15
Nesting sanctuary sites selected...	9

Quail cover is being reduced by the removal of the Osage orange hedges. Pheasant food supply and cover have been increased to some extent by certain crop land practices resulting from Federal allotments of corn and wheat acerages.

It is recommended that the rose planting program be continued and that certain species, black walnut and some conifers suitable for Christmas trees, be added to the planting program for use in small numbers for the establishment of nesting sanctuaries.

E. State Parks

Nebraska State Parks are operated on appropriated funds plus cash income and is the only sub-division of the Commission financed by general tax funds. For this reason, separate records are maintained. Statistical and comparative data will be found subsequently under "Division Statistics."

Following are the individual activity reports of the park Superintendents:

Arbor Lodge State Park
SUPERINTENDENT: Grant McNeel
LOCATION: Nebraska City

Mission

Preservation, maintenance and display of the former home of J. Sterling Morton family, and care of the grounds on which are growing a large variety of trees, shrubs and flowers.

Summary of Activities

This park, located in Nebraska City, is a "day use" area of extreme scenic and historic interest. It comprises a large arboretum, picnic area, mansion and other improvements.

This historic home of J. Sterling Morton, founder of Arbor Day, and the surrounding grounds require year-around maintenance and repair by the Superintendent and his assistants, even though the park is primarily seasonal in its use by the public. This park welcomed approximately 29,800 visitors during the 1954 season.

Winter months at this park produced only enough time to accomplish such maintenance work as regular inspection of fire alarm systems, repair of tools and equipment. Preliminary mansion preparation for summer, roof repair, and repair of signs, picnic facilities and road improvements, care of greenhouse material and ordering of new planting stock is another annual late winter job at Arbor Lodge.

Considerable time and effort was contributed by the personnel in a cooperative Nebraska City Centennial project. The park provided considerable historical information and materials for this spectacular event. The water system in the park was cleaned out and several improvements made.

Spring months included some house cleaning, arranging of furniture and exhibit preparation. New and historic trees were banded, arbor areas and flower beds were cleaned and planted, including fourteen different kinds of trees and twenty-five species of flowers.

Spraying is a constant spring and summer work in this area of countless trees and flowers. Primary summer work included daily guide tours for the public, regular cleaning of the mansion and constant mowing and clean-up of the picnic grounds, including the trimming of 1,000 feet of hedge. The drouth period called for irrigating of the young trees, as well as constant weed control. In addition to the above monthly activities, all of the historic carriages on display were cleaned and polished and the tree-trail was completely renovated.

Fall completed the year's activities with additional painting of the inside of the garage and guard rails, greenhouse repair and final mowing and trimming operations. Bulbs and plants were removed to the greenhouse, shop work and equipment repair started.

In addition, the Superintendent has considerable desk work pertinent to correspondence regarding the mansion and his regular administrative reports.

Chadron State Park
SUPERINTENDENT: L. M. Snodgrass
LOCATION: Chadron

Mission:

Protection, preservation and display of the Pine Ridge area within the park. Operation of the private cabins, group camp, swimming pool, camp grounds and related facilities.

Summary of Activities:

New Improvements

Two new cabins were built, complete with water, electrical and sewer service. Five old cabins were completely rebuilt to double modern units, with water, electrical and sewer service. 3,500 feet of ditch was dug by the park personnel for service to the 7 new units, consists of gas, water, sewer, and underground electrical power. One storage and supply

building 22 feet x 42 feet was built in the service area. 8,000 feet of ditch was dug where secondary underground wire was installed for electrical service to all units, 43 buildings completely rewired, all old overhead wire and poles were taken out, 3,000 feet of primary power line and racks was replaced. New flood lights were installed at swimming pool, service area, yard at headquarters, camping area and parking area. New auto gate installed on concrete pit, 2½ miles new road was built, a parking area and an observation area were cleared and graded on the new area. A bridge was installed across the creek to the service area, one garbage pit 8 feet x 10 feet x 200 feet was dug.

Chronological Activities

Wyoming and Nebraska Boy Scouts, camp and meeting, The Northwestern Bell Telephone Company picnic and meeting, The Nebraska Hefford Breeders Meeting, Consumers Public Power District picnic and meeting, The Tri-State Oil Company picnic and meeting.

Maintenance

Redecorated kitchen, latrines, shower rooms, wash rooms, repaired 78 screens, replaced 21 window panes, replaced old plumbing in the kitchen, repaired 5 outside doors, repaired 8 screen doors, maintained water system and sewer system, cleaned the camp after each of the 12 camps, the garbage was cleaned up daily, this was also done at the Group Camp, the camp consists of 11 large buildings, with 7,000 feet of floor space.

Major repairs were done on the windmill on the west area, the roofs were repaired on ten buildings, approximately 75 acres of lawn was mowed and tended by hand power mower and hand tools. The lagoon was stocked with crappie, bass, bluegill, bullheads, and perch. The creek was stocked with trout. Play ground equipment was painted and repaired, 300 feet of drain tile was added to the public latrines, 7 boats were repaired and painted, 22 oars were repaired and painted, 2 power lawn mowers, 2 tractors 2 pickups, 1 winch truck, 1 fire truck and fire equipment, and 2 panels were operated, serviced and repaired. Many items, major and minor, were repaired and welded at the park shop. 7 forest fires were controlled by the park personnel in this area. The plumbing was assembled in the spring and dismantled in the fall, at the laundry room, bath house, group camp, swimming pool, 10 cabins, store, cafe, public latrines and out side water hydrants, this consists of 26 toilet stools, 13 kitchen sinks, 14 water heaters, 20 showers, 2 pumps, and 5 hydrants. The picnic area, public latrines and the bath house were cleaned and serviced daily, the garbage cans were sprayed with DDT daily. The road sides, ball park, cabin area, group camp area, service area, and open fields were mowed, and the roads were maintained as needed. 6 miles of boundry fence was repaired and maintained, 2 road culverts were installed, 11 cabins were painted, including the roofs, 200 mattress pads were repaired with new duck covering

Operations

Office correspondence, mail handling for the group camp and cabins, group camp agreements and cabin reservations, general information, public meetings at high schools, civic groups and sports clubs. Rural fire truck and equipment in approximately 30 square miles. Major water system, major power system, group camp and cabin maintenance, laundry complete, 23 automatic water heaters, 10 gas ranges, 7 gas refrigerators, 2 electric refrigerators, 1 electric walk-in cooler, bath house, boat renting, swimming pool, circulator pump, chlorinator pump and mixing, store and cafe, first aid emergencies, messages to group camp and cabins trailers and campers. 268 sleeping units in the cabins and group camp, daily cleaning and service at the cabins. Helped furnish fire protection and fire fighting service for approximately 50,000 acres of Pine Ridge in Park vicinity.

Niobrara State Park
SUPERINTENDENT: Paul Meyer
LOCATION: Niobrara

Mission

Operation and maintenance of rental cabins, group camp, picnic area and related activities.

Summary of Activities

In addition to routine activities of operating and parks facilities, we have constructed two new all modern cabins complete with water, sewage and electrical installations. Cabins have all new dishes, furniture, bedding and curtains.

The laundry was completed, cement floor, water, sewage, rewired, hot water heater installed, also a sink. The laundry was also completely lined inside and painted on the outside.

We completely rewired the assistants quarters, two car garage and the work shop.

One Barracks 20 feet x 70 feet has been about 90% lined inside, insulation board on the ceiling, $\frac{1}{2}$ inch 4 feet x 8 feet sheet rock down 4 feet and 1 x 10 inch ship lap the rest of the way down.

Several trees that were cut by the beaver and blown down by the wind were salvaged and some were sawed up for heating the shop, trees were trimmed in the picnic area and the wood salvaged for the camping area to be used in the fireplaces.

Seeded the south dike to brome grass and alfalfa, seeded the area that is now the ball park to alfalfa, put two toilets in the ball park area. Painted the outside of two cabins and one pump house, and painted the outside of the two new cabins twice.

Installed a new shallow well pump in the group camp area, painted inside of toilets in the group camp area.

Put up a flag pole in the area of the office. Graded a new road from the hiway to the new cabin area, repaired and maintained all the roads in the park and all other general maintainance such as mowing the park and picnic areas at least once a week, weather permitting. Also maintained the golf course.

Ponca State Park

SUPERINTENDENT: Paul Heil - Dallas Johnson

LOCATION: Ponca

Mission

Preservation of native Missouri River Bluff area within the park and operation of the rental cabins, group camp, recreation areas and related activities.

Summary of activities

The department this year suffered a great loss in the death of Mr. Paul Heil, the Superintendent. His successor, Mr. Dallas Johnson, was appointed in December but as he did not take office until his replacement as District II Operations Manager was appointed, a formal annual report for Ponca State Park is not available.

Between the time of Mr. Heil's passing and Mr. Johnson's appointment, the park was capably managed by Mr. Jerome Bauman, Heil's assistant, and monthly activities progressed as usual.

No major capital improvements were started or completed in 1954 although the entrance road from State Highway 9 to the park headquarters was regraded and gravel surfaced.

Work for the year consisted primarily of general maintenance and operation of the group camp, rental cabins, and picnic areas.

Ponca Park is located near large centers of population, but is sadly lacking in recreational features other than picnic areas.

Stolley State Park

SUPERINTENDENT: John Tooley

LOCATION: Grand Island

Mission

Preservation and display of historical buildings. Operation and

maintenance of recreation area and tree plantations. Display of deer herd.

Summary of Activities

Stolley State Park is adjacent to Grand Island and is one of the Commission's "day use" parks. This park accommodated approximately 20,150 visitors during the year.

Although this park is primarily of seasonal interest to visitors, operations and maintenance comprise a year-around activity for the Superintendent and his assistants.

Late fall and winter months provide time for trimming trees, improving roads and general clean-up of the grounds and properties.

During the spring months, equipment was overhauled, a large nursery pen was constructed for the demonstration live animal area, and a new water line was laid, including installation of hydrants and pumps. New playground equipment was installed and considerable seeding was done in various areas of the park. Over 750 trees were planted during this period, as well as over 1,000 flower plants.

During the summer months, the large number of visitors, of course, required constant service, maintenance, and clean-up work. Mowing operations were heavy throughout the park during this period, followed by round-the-clock irrigating during the drouth period. New signs, guard posts, and picnic facilities were also added during this period.

Fall reduced visitors but increased opportunities for painting portions of the improvements, as well as general clean-up, draining of water systems, clean-up of flower beds and storage of bulbs.

Winter clean-up and repair, hedge planting, road maintenance and other winter work is carried on by the Superintendent alone.

Victoria Springs State Park
SUPERINTENDENT: Howard Jones
LOCATION: Anselmo

Mission

Operation of recreation facilities including boating, fishing, picnicking, ball and playgrounds, and rental cabins.

Summary of Activities

Rebuilt both dikes of the lake and have 24" more water than before, built 18 new picnic tables and repaired the old ones and painted them.

Raked and burned leaves, cut dead trees, dug out stumps, replaced guard posts and painted them, painted the gates at the entrance of the park, painted the shelter house, sowed bluegrass, rebuilt the old pump house, took down one of the old cottages and set out trees and shrubs. Also, general maintenance keeping the picnic grounds clean and mowed.

New Improvements

Two new modern cottages with water, electrical appliances, sewage, and gas heaters. New well for cottages and irrigation of the grass around the cottages and new pump house. Lights on the picnic grounds, we used 2600 lin. ft. of underground wire for the new improvement and sink for the house.

Fort Kearny State Park
SUPERINTENDENT: None
LOCATION: Newark

This 40 acre tract is the site of a portion of old Fort Kearny established in 1848. The area is of considerable historical significance to Nebraska but has little recreational potential due to it's small size, monotony of terrain, and distance from population centers. Fort Kearny is not rated to be of national historical significance.

The area has been maintained as a recreation ground in recent years, although maintenance has been poor. The department has experienced difficulty in interesting a local farmer in assuming caretaker duties although a more liberal proposition will be offered in the Spring of 1955 and it is believed that a part-time caretaker may be secured.

If the area is to be retained permanently in the park system, it will probably be necessary to construct a caretakers residence on the property and create a full time position.

In 1948 a master plan was drawn for the area by a consultant engineering firm and it was then estimated that about \$106,000.00 would be required to reconstruct one historical building, restore roads and construct some modern improvements such as a caretakers residence, roads, water, toilet facilities, etc.

It is the belief of the Park Supervisor, that the State Park system has no business in the field of complete restoration of historical buildings for no useful purpose other than that of historical interest in the face of limited funds for park development and an increasing demand for public recreational area and facilities.

The Supervisor is in complete accord with the preservation and development of Nebraska historical sites, but not at the expense of our basic recreation requirements.

DIVISION STATISTICS

A. Income

The Commission authorizes the Land Management Division to enter into lease agreements with private individuals for use of various state owned

areas, primarily state recreation grounds, also State Parks, public hunting grounds and refuges. No such agreement restricts the value of any area for wildlife or recreation and often enhances such values.

Most of the agreements fall into one of the following categories: Agriculture, Grazing, Concession, Hay Cropping, and Seed Cropping.

I	Miscellaneous Areas.....	\$ 14,376.74
II	Reservoir Areas.....	20,723.06
III	State Parks: (Includes cabin rentals, etc.)	

Arbor Lodge.....	\$ 3,962.15
Chadron.....	8,736.39
Niobrara.....	4,812.85
Ponca.....	1,511.75
Stolley.....	79.81
Victoria Springs.....	<u>17.59</u>
	<u>19,120.54</u>

Total Division Income	\$ 54,220.34
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B. Remarks -- Statistical and Comparative

It may be noted that the reservoir crew has a disproportionate number of vehicles and that the grade of the individuals assigned is not in proportion with the number. Many of the Superintendent's duties are administrative as well as supervisory and he must maintain constant liaison with various agencies of the federal and state government, as well as the land operators. The peak work load is distributed over about a six month period during which time temporary employees are hired and directly supervised by the working foreman.

Income from miscellaneous areas for the year exceed that of 1953 by about a thousand dollars, probably resulting from better supervision at field level.

Income from Medicine Creek and Enders reservoirs was up slightly in 1954 although total reservoir income in 1954 exceeded 1953 by about \$5,700 due mostly to the addition of Swanson Reservoir.

State Park income for 1954 exceeded income last year by more than three thousand dollars. All parks except Niobrara and Victoria Springs showed an increase in revenues. The lake at Victoria Springs was drained in late 1953 and work was not completed and the lake refilled until late 1954.

The 1954 income at Niobrara was \$123.69 under that of 1953 and can probably be accounted for by noting that two group camps cancelled out that used the park in 1953. Niobrara cabin income and overall attendance was well over 1953 figures. Total estimated state park attendance in 1954 was 241,713 compared with 233,041 in 1953.

STATE PARKS - GENERAL

Three of Nebraska's seven state parks can be considered to be of state park size, although none of them approach the size of the average state owned area in the United States. These are Chadron, Niobrara, and Ponca with state owned lands of 165, 408, and 289 acres respectively. There are 1,360 additional acres of leased land at Chadron.

Nebraska ranks 33rd in population, 31st in total state owned recreational area (including recreation grounds), and 16th in total number of recreational areas including recreation grounds.

There are, at present, 74 state park agencies that contribute data annually to the publication "State Park Statistics", compiled by the National Park Service and from which comparative state data for this report is derived.

These agencies, including Nebraska, listed 1,853 state areas in 1953. The average size of these areas was 2,620 acres. The average size of the Nebraska areas in 1953 was 381 acres.

Nebraska ranks well up in total number of areas, but far below the national average in size of areas.

Oregon, Colorado and Arkansas are near Nebraska's 1,325,510 population category having populations in 1950 of 1,521,341, 1,325,089, and 1,909,511 respectively. Arkansas and Colorado have only rudimentary state park systems with eight areas in Arkansas and four in Colorado, but each have large areas of federal land. Arkansas has 2,361,520 acres of National Forest area, and 1,019 acres of National Park area, while Colorado has 13,728,899 acres of National Forest area and 246,754 acres of National Park area.

Nebraska has no National Park area and only 206,028 acres of National Forest land, little of which is of value from a recreational standpoint.

Oregon has roughly three times as many areas as Nebraska but only about 13% more population. In 1953 Oregon appropriated \$1,000,865.00 for maintenance and development of her recreational areas while Nebraska appropriated \$161,002 for the same purposes.

In percentages of the budget spent for the various budgetary divisions Nebraska rates about average. The 74 agencies reporting in 1953 spent an average of 62% of the budgets for operation and maintenance and 38% for capital improvements. Nebraska, in this period, spent 68% of her park budget for operation and maintenance and 32% for capital improvements.

The 6% difference is in Nebraska's expenditure of 6% less for capital improvements which is reflected in her paying 5% more for salaries and 1% more for maintenance. This does not mean that Nebraska pays higher wages to her park employees than is average nation wide.

Nebraska has found by experimentation that construction of capital improvements can be accomplished more cheaply by furnishing her own supervision and hiring outside labor than by the straight contract method. Thus, the labor costs of such construction are budgetarily reflected in overall salaries and not in capital improvements.

Nebraska has long operated her state parks on the theory that being tax supported, excessive fees for their use should not be charged. "Excessive Fees" in this instance refer to entrance fees, parking fees, firewood fees, etc. Fees must be charged, of course, for personal services such as overnight accommodations, boating, etc.

In 1953, the 74 reporting agencies spent approximately 48 million dollars in all operations. Revenue from operations during the same period was approximately 10½ million dollars. Revenue was, therefore, about 22% of expenditures. Nebraska's revenue during this period was 14% of expenditures.

During the same period, the 74 agencies reported that income was 36% of operation costs (salaries, maintenance, supplies, etc.) Nebraska's income was 23% of her operation costs.

Nebraska's lower than national average income percentage in proportion to expenditures, we believe, reflects not only the theory noted in the foregoing but also that the six parks that are permanently staffed are better maintained than the national average for similar facilities.

It can readily be seen from the above that nationally speaking, expenditures for capital improvements for state parks such as cabins, permanent camps, swimming pools, etc., are "written off" to the public welfare, with incomes absorbing only a little over a third of the expenses of operation.

New York state has the most extensive park system in the United States. In 1953, that state spent over 10 million dollars in her park system and derived 2 million plus in revenues, which were about 24% of expenditures. Yet, New York has a very extensive fee system, charging for everything from parking to rental beach umbrellas.

It is estimated that about 60,000 cars visited Nebraska's parks in 1954. At 50 cents per car, which is the parking fee charged by some agencies of the California, Maryland, New Jersey, New York, etc., systems, this would presumably have been an income of \$30,000. However, it is highly doubtful that attendance would have been as high with fees of this nature, and their value is questionable.

The Nebraska state park system does not have the personnel or facilities to take exact attendance figures and whether attendance

estimates are accurate is not known. We do know, however, that the estimates have been made by about the same employees and by the same formula since 1952 which makes the trend reliable, and overall attendance has risen annually since that date. This trend is substantiated by increasing incomes and by ticket sale records of visitors touring the mansion at Arbor Lodge State Park.

This upward trend is reflected nation wide as well. How long it will continue cannot be known, but with the national population increasing annually it can probably be expected to rise as long as the country remains prosperous or until a national emergency restricts travel or reduces the population. The following is the estimated attendance by parks for 1953 and 1954.

1953	PARK	1954	Percent of Change
40,722	Arbor Lodge	35,060	minus 14
65,070	Chadron	79,498	plus 19
54,000	Niobrara	60,475	plus 11
42,900	Ponca	36,350	minus 16
18,850	Stolley	19,850	plus 6
<u>11,499</u>	Victoria Springs	<u>10,480</u>	<u>minus 9</u>
233,041	Total	241,713	plus 4

For reasons noted above, we do not know what percent of people using the parks and state recreation grounds are Nebraskans, but we do know that only 14.2% of Chadron's 2,929 cabin guests in 1954 were from out of state, and that .09% of Niobrara's 1954 cabin guests were non-residents.

If the above attendance figures are applied to Nebraska's 1950 population of 1,325,510, it would mean that one out of every five persons visited a state park in 1954.

If the estimated 170,000 visitors using Nebraska's recreation grounds and state controlled reservoir areas are included and are so applied, it would mean that one out of every 2.1 persons visited a state sponsored recreation area in 1954. There is no way, of course, of determining how many of such visits were repetitions, how many non-resident, etc., we are merely comparing the total visits with a number of people equaling Nebraska 1950 population.

In any way that the situation is considered, however, park use is a large item in the Nebraska family recreation scene.

LAW ENFORCEMENT

PERSONNEL By W. R. Cunningham, Supervisor

There has been a considerable degree of personnel change during 1954, all of which was in direct connection with the initiation of the new district organization program adopted by the Commission. This program was in formulation during the entire summer and activation of District Offices began on September 1, 1954.

Under this program, officer personnel was surveyed and contacted for the appointment of District Chief Officers, giving first consideration to the older officers both in age and service.

The following personnel transfers resulted:

A. G. McCarroll from Cody to Long Pine
Sam Grasmick from Minden to North Platte
Edward Bosak from Hastings to Alliance
W. J. Ahern from Bassett to Ord
James McCole from North Platte to Scottsbluff
John Harpham from Falls City to Valentine

Two new men were employed to fill vacancies, and after in service training were stationed as follows:

Carl Gettmann to Hastings
Harland Huppert to Falls City

These two men are continuing to progress and prove their worth to the Game Commission.

One of our officers, Norbert Kampsnyder of Grand Island, Nebraska was wounded in the forearm by gunshot while breaking up a hold-up and car theft attempt which occurred while he was present at a cafe at Grand Island. He was shot with a 30 caliber rifle by a crazed negro who was attempting the hold-up and theft. Officer Kampsnyder is making good progress in use of his arm and hand.

ARREST ANALYSIS

The total number of offenses, violations, and arrests exceed those of 1953 by 8.4 %. The successful conviction record still remains at better than 98 %, a figure which has been maintained since 1948.

Total fines assessed increased by 39.3 % over 1953 and Liquidated Damages assessed increased by 72 % over the previous year.

These increases in comparison to each other and to the previous years are indicative of very tight case work by our officers, improved court and county official relations and reflect the attitude of the courts in assessing heavier penalties. The attached map showing arrests by counties shows that we have achieved greater coverage of the state than before due to a change and relaxation of definite county line districts for field patrol by our officers where they were restricted to the same path of operation. This system is also improving the uniformity of procedure by the officers and courts in that overlapping of work area increases familiarity with others and their activities.

When it is noted that there was an increase in the total number of arrests, it is also probable that the increase would have been greater if a full complement of officers had been operating for the full year in field work. Actually, Officer Kampsnyder, who was shot in the arm, was off duty for 3½ months. The two new men were in training for three months and, as previously mentioned, a number of men were involved in house hunting and moving.

MAJOR VIOLATIONS

Some of the most serious examples of violation were uncovered and prosecuted in 1954, including a number of cases in the 2 to 4 hundred dollar penalty category and one case in which 3 non-resident hunters paid a total of \$1140.00 fines and liquidated damages, this case involving the killing of 19 pheasants over the limit most of which were hens.

In another case, an individual violator was found in possession of quail out of season, doves out of season, and 13 pheasants over the bag limit. His total penalty was \$674.00.

Another unusual case involved an individual taking ducks out of season by catching them on shoreline throwlines with hooks baited with corn in the spring of the year. After apprehension he was found to also be in possession of 4 pheasants and 5 ducks out of season.

A total of 21 arrests occurred for killing and possession of big game out of season. Twelve of these cases were connected with the special patrol activities during and before the 1954 deer season. Officer personnel were not restricted by checking station duty during this season and consequently were more active in the field. The liquidated damage monies resulting from these 12 arrests amounted to \$1425.00 which covered the personal expenses of these officers during the season.

The Commission airplane, with the radios we have, played a large part in patrol activities, particularly on out of season hunting on the Dodge-Saunders refuge, pre-season antelope survey, patrol of the antelope season and patrol of the area closed to pheasant hunting in the South part of the state where 21 arrests resulted from plane and radio activity. It is proving very valuable on out of season hunting.

CLASSIFIED OFFENSES

Fishing

Fishing without permit	115
Over bag limit of game fish	19
Possession and use of illegal fishing devices	12
Fishing with too many hooks	12
Hand fishing	12
Snagging fish	10
Non-resident using resident permit	10
Spearing fish during closed season	10
Illegally seining fish	7
Illegal possession of seines	6
Using throw lines in State owned lake	4
Selling minnows without permit	4

Hunting

Shooting game birds in closed season	64
Loaded shotgun in vehicle on highway	41
Illegal killing and possession of ducks	33
Hunting without a permit	30
Non-resident hunting on resident permit	20
Illegal killing and possession of deer	18
Shooting game from public highway	15
Hunting out of season	13
Illegal possession of game birds	12
Hunting in closed area	10
Overbag limit of ducks	10
Hunting game birds with unplugged gun	10
Shooting and taking of hen pheasants	6
Overbag limit on pheasants	6
Killing Doves in closed season	6
Illegal possession of doves	3
Hunting on State Game Refuge	3
Killing antelope in closed season	3
Illegal possession of quail	2

Possession of pheasants without sex identification	2
Shooting ducks with a rifle	2
Shooting cottontails after dark	2
Using hunting permit of another	1
Shooting game birds from a motorboat	1
Killing geese with airplane propellor	1
Shooting song birds	1
Possession of overbag limit on rabbits	1

Trapping and Miscellaneous

Drinking Alcoholic beverages on State property	9
No Game Farm permit	4
Non-resident trapping on resident permit	3
Possession of Muskrat pelts in closed season	3
Operating motorboat on restricted state lake	3
Operating Cyanide gun without permission	1
Dumping rubbish on State property	1
Allowing dogs to run loose during nesting season	1
Trapping in closed season	1
Incomplete fur records	1
Speeding	1

MAJOR OFFENSES 1954

1. Fishing without permit	24 %
2. Shooting game birds out of season	14 %
3. Loaded shotgun in vehicle	9.7 %

MAJOR OFFENSES 1953

1. Hunting Game birds out of season	18 %
2. Loaded shotgun in vehicle	14 %
3. Fishing without permit	11 %

PERMIT REVOCATIONS

Permit privileges of 3 individuals were revoked in 1954 under the provisions of Section 37-207.

1. Game farm permit revoked for indefinite period due to illegally taking ducks.
2. All permit privileges revoked for a period of 2 years due to being convicted of game law violations 3 times. Involved two different men.

NON-RESIDENTS

Non-resident hunting activity was definitely down again this year while non-resident fishing activity was up. Non-residents are a heavy contributing factor to our violations as shown by the following figures:

Non-residents purchasing resident permits	7 %	of Total Arrests
Total non-resident violations	17 %	

Non-resident permit violations might decrease materially and department income increase if our non-resident permit fee system were altered to a set fee basis rather than reciprocal.

Many non-residents are only here for a few days and don't like to pay \$3.00 for a 10 day fishing permit when they can only fish one or two days. A three day permit at \$1.00 might solve the problem and sell more permits.

Since most other states have increased their fees for hunting permits and are also reciprocal the fee for a non-resident hunting permit in Nebraska varies from a \$10.00 minimum to as high as \$35.00. It would seem that a standard fee of \$15.00 or so might strike a medium that was not too encouraging and yet was not excessive. Such a procedure could eliminate the bookkeeping difficulties of permit accounts and our own permit division, while income might be benefited or remain approximately the same. Many misunderstandings result from the present non-resident fee situation.

COURT ACTION FINANCIAL REPORT

I	Total offenses	62
	Total arrests	477
	Total convictions	473
	Total not guilty	4
	Conviction record	98 %
II	Total Fines (To County School Funds)	\$8,319.00
	Fines suspended payment	412.00
	Total Costs (To County Courts)	1,868.44
	Liquidated Damages Assessed	8,260.50
	Liquidated Damages collected (To date)	6,660.00
	Sale of Confiscated guns	2,406.00
III	Guns Confiscated	71
	Game birds confiscated	257
	Game fish confiscated	616 + 100 lbs. dressed
	Game animals confiscated	96 + 23 pkgs. deer
	Furs confiscated	132
	Illegal devices	218
	Permits confiscated	30

ANNUAL ARREST HISTORY

<u>YEAR</u>	<u>NO. OF ARRESTS</u>
1944	479
1945	335
1946	440
1947	442
1948	502
1949	480
1950	455
1951	442
1952	522
1953	432
1954	477

SUMMARY OF ACTIVITIES

Miles Traveled (vehicle)	998,098
Miles Traveled (Airplane, Est.)	25,950
People Checked in field	55,839
Complaints investigated	1,113
Public meetings attended	315

VEHICLE OPERATING EXPENSES

Vehicle operating expense for 1954 held to 3¢ per mile again for the third year in a row since we have been using the heavy police specials. Previous to that time our operating cost was as high as 4.6¢ per mile.

1953	Travel (965,783 miles)	\$18,935.00
	Repairs	10,186.00
1954	Travel (998,098 miles)	21,725.85
	Repairs	12,424.44

AIRPLANE OPERATION AND EXPENSE

Total flying hours - 259.5

Gasoline	\$ 780.18
Oil	37.90
Repair and Maintenance	122.31
Storage	<u>240.00</u>
TOTAL	1,180.39

Cost per hour	4.54
Cost per mile	
@ 100 m.p.h.	4.5¢

The previous figures indicate an increase in operating and repair costs, which is explained by several factors, as follows:

1. Greater total miles driven.
2. The 1952 model cars were held over and not replaced in July as previous years. They were not taken off the road until new vehicles were made available in October of 1954. Consequently, we ran into some extra expenses on these vehicles with higher total mileage service.

This report is intended to be brief, informational and factual to the best of our knowledge.

We thank each and all other personnel, Divisions and the Commission for making 1954 a successful year.

LEGAL COUNSEL

Carl Peterson

The Legal Counsel actually serves in several capacities. Primarily, legal duties include:

1. Litigation for or against the Commission.
2. Land purchase problems in purchase and sale of land.
3. Workmen's Compensation cases.
4. Vehicle accident claims.
5. Permit collection problems.
6. Assisting officers with special problems.

In addition, the Legal Counsel carries a share of the many public relation programs over the State, showing pictures and giving talks.

The Legal Counsel also serves as an assistant to the Secretary in the office in the absence of the Secretary or other Supervisors. He also handles procedures and problems pertinent to legislation and legislative bills, as well as a liaison between the Commission and the Attorney General's office.

GENERAL INFORMATION

The following pages are devoted to general itemized and statistical information for those who are interested:

Departmental Cash Income:

Year	Total	Permit Sales	Federal Aid	Cash from Parks
1940	\$236,794.33	\$225,846.12	\$ 6,513.74	\$ 4,434.47
1941	275,178.55	244,364.33	24,594.43	6,219.79
1942	298,694.94	254,488.64	38,542.13	5,564.17
1943	258,489.09	230,742.29	21,307.90	6,438.90
1944	319,644.65	308,134.76	4,414.22	7,095.67
1945	379,757.67	365,045.90	6,562.88	8,148.89
1946	571,783.97	553,119.64	8,131.76	10,532.57
1947	459,065.98	421,969.24	24,836.09	12,260.65
1948	650,621.87	501,366.98	133,399.55	15,855.34
1949	757,902.42	480,964.18	260,796.04	16,142.20
1950	774,076.04	652,733.54	104,558.78	16,783.72
1951	869,890.33	740,245.36	113,558.51	16,086.46
1952	1,012,189.42	803,304.64	192,401.64	16,483.14
1953	991,563.68	856,996.82	116,478.88	18,087.98
1954	1,058,334.31	786,997.92	252,215.85	19,120.54

Real Properties

54 Lakes and Recreation Grounds	3 Bird Refuges
6 Hatcheries	7 State Parks
4 Public Shooting Grounds	1 Big Game Refuge
3 Big Game Refuges and Shooting Grounds	

Vehicles and Equipment

41 Cars	1 Air Compressor
89 Trucks	1 Cement Mixer
31 Tractors	2 Trailers
1 Six-inch gravel pump	1 Sheepsfoot Roller
1 Four-inch gravel pump	2 Scoops
1 Two-inch pump	6 Chain Saws
2 Caterpillars	1 Inboard patrol boat
1 Dragline	1 Inboard work boat
1 Traxcavator	49 Small boats
2 Welders	1 Airplane

NEBRASKA RADIO STATIONS

Carrying
Game Commission Broadcast

KXXX....Colby, Kansas.....6:30 A.M.....Sunday.....790 kc
 KCNI....Broken Bow, Nebraska...12:45 P.M.....Saturday.....1280 kc
 KCOW....Alliance, Nebraska.....8:30 P.M.....Tuesday.....1400 kc
 KCSR....Chadron, Nebraska.....11:30 A.M.....Saturday.....1450 kc

NEBRASKA RADIO STATIONS
Carrying
Game Commission Broadcast
(Continued)

KGFW....	Kearney, Nebraska.....	5:30 P.M.....	Saturday.....	1340 kc
KJSK....	Columbus, Nebraska.....	1:45 P.M.....	Monday.....	900 kc
KMMJ....	Grand Island, Nebraska.....	10:15 A.M.....	Sunday.....	750 kc
KBRL....	McCook, Nebraska.....	10:15 A.M.....	Sunday.....	1450 kc
KFOR....	Lincoln, Nebraska.....	5:15 P.M.....	Saturday.....	1240 kc
WJAG....	Norfolk, Nebraska.....	8:30 A.M.....	Sunday.....	780 kc
KODY....	North Platte, Nebr.....	10:45 A.M.....	Sunday.....	1240 kc
KOLT....	Scottsbluff, Nebr.....	9:15 P.M.....	Saturday.....	1320 kc
KRVN....	Lexington, Nebr.....	8:30 A.M.....	Saturday.....	1010 kc
WOW....	Omaha, Nebraska.....	10:15 A.M.....	Sunday.....	590 kc
KFGT....	Fremont, Nebraska.....	5:15 P.M.....	Monday.....	1340 kc
KHAS....	Hastings, Nebraska.....	5:15 P.M.....	Saturday.....	1230 kc
KSID....	Sidney, Nebraska.....	4:00 P.M.....	Wednesday....	
KOGA....	Ogallala, Nebraska.....	930 kc

DEPARTMENT PAYROLL
December, 1954

Full-time Employees150

<u>Position Title</u>	<u>Number</u>
Executive Secretary	1
Supervisors	65
Legal Counsel	1
Project Leaders	2
Class I Superintendent	10
District Managers	23
Class I Research Men	3
Class II Superintendent	2
Conservation Officers	24
Foremen	18
Fieldmen I	17
Fieldmen II	25
Stenographic Assistants	18

SALARY SCHEDULE

<u>Classification</u>	<u>Grade 6</u>	<u>Grade 5</u>	<u>Grade 4</u>	<u>Grade 3</u>	<u>Grade 2</u>	<u>Grade 1</u>
Supervisors	\$370.00	\$380.00	\$390.00	\$400.00	\$410.00	\$420.00
Project Leaders	335.00	340.00	345.00	350.00	355.00	360.00
<u>Dist. Officers</u>						
Class I Supt.	\$315.00	\$320.00	\$325.00	\$330.00	\$335.00	\$340.00
Dist. Managers	315.00	320.00	325.00	330.00	335.00	340.00
Research Men I	315.00	320.00	325.00	330.00	335.00	340.00

SALARY SCHEDULE
(Continued)

<u>Classification</u>	<u>Grade 6</u>	<u>Grade 5</u>	<u>Grade 4</u>	<u>Grade 3</u>	<u>Grade 2</u>	<u>Grade 1</u>
<u>Area Officers</u>						
Research Men II	\$260.00	\$270.00	\$280.00	\$290.00	\$300.00	\$310.00
Foreman	260.00	270.00	280.00	290.00	300.00	310.00
Class II Supt.	260.00	270.00	280.00	290.00	300.00	310.00
Conserv. Officer	260.00	270.00	280.00	290.00	300.00	310.00
Fieldmen I	240.00	245.00	250.00	255.00	260.00	265.00
Fieldmen II	200.00	205.00	210.00	215.00	220.00	225.00

NEBRASKA GAME COMMISSIONERS AND DISTRICTS

DISTRICT NO. 1

Counties

Harold Hummel
Route 1
Fairbury, Nebraska

Cass ✓	Lancaster ✓	Richardson ✓
Gage ✓	Nemaha ✓	Saline ✓
Jefferson ✓	Otoe ✓	Seward ✓
Johnson ✓	Pawnee ✓	

DISTRICT NO. 2

Bennett Davis
1646 North 53rd
Omaha, Nebraska

Butler ✓	Douglas ✓	Saunders ✓
Colfax ✓	Sarpy ✓	Washington ✓
Dodge ✓		

DISTRICT NO. 3

LaVerne P. Jacobsen
325 Sheridan
St. Paul, Nebraska

Antelope ✓	Dixon ✓	Pierce ✓
Boone ✓	Greeley ✓	Platte ✓
Burt ✓	Howard ✓	Stanton ✓
Cedar ✓	Knox ✓	Thurston ✓
Cuming ✓	Madison ✓	Wayne ✓
Dakota ✓	Merrick ✓	Wheeler ✓
	Nance ✓	

DISTRICT NO. 4

Leon A. Sprague
Red Cloud
Nebraska

Adams ✓	Franklin ✓	Polk ✓
Buffalo ✓	Hall ✓	Thayer ✓
Clay ✓	Hamilton ✓	Webster ✓
Fillmore ✓	Kearney ✓	York ✓
	Nuckolls ✓	

DISTRICT NO. 5

Don F. Robertson
Pawnee Hotel
North Platte, Nebraska

Chase ✓	Furnas ✓	Lincoln ✓
Dawson ✓	Gosper ✓	Perkins ✓
Dundy ✓	Hitchcock ✓	Phelps ✓
Frontier ✓	Harlan ✓	Red Willow ✓
	Hayes ✓	

DISTRICT NO. 6

Frank P. Button
Ogallala
Nebraska

Arthur ✓	Garfield ✓	Loup ✓
Blaine ✓	Grant ✓	McPherson ✓
Boyd ✓	Holt ✓	Rock ✓
Brown ✓	Hocker ✓	Sherman ✓
Cherry ✓	Keith ✓	Thomas ✓
Custer ✓	Keya Paha ✓	Valley ✓
	Logan ✓	

DISTRICT NO. 7

Floyd Stone
Alliance
Nebraska

Banner ✓	Deuel ✓	Morrill ✓
Box Butte ✓	Garden ✓	Scotts Bluff ✓
Cheyenne ✓	Kimball ✓	Sheridan ✓
Dawes ✓		Sioux ✓

DEPARTMENT PERSONNEL

<u>Name</u>	<u>Position Title</u>	<u>Address</u>
Paul T. Gilbert	Executive Secretary	1615 So. 44, Lincoln
Carl E. Peterson	Legal Counsel	1919 Ryons, Lincoln

CONSTRUCTION-ENGINEERING DIVISION

Eugene H. Baker,	Supervisor	615 So. 36th, Lincoln
Lem Hewitt	Dist. Manager	Dist. Office, Alliance
Merl Johnson	Foreman	Housing Proj., Alliance
Robert Wright	Fieldman II	Housing Proj., Alliance
Charles Giles	Fieldman II	408 Sweetwater, Alliance
Lewis Klein	Dist. Manager	Bassett, Nebr.
Marvin Nelson	Foreman	Box 171, Bassett
John Ferry	Fieldman I	Box 166, Bassett
Zane Hipke	Fieldman II	Ainsworth
Richard Wickert	Dist. Manager	Lakeside Motel, Norfolk
Elwin Hall	Foreman	1115 Logan, Norfolk
Erdman Leu	Fieldman I	Rt. 1, Pierce
Clifford Milligan	Fieldman II	506 Blain, Norfolk
Robert Reynolds	Fieldman I	Lakeside Motel, Norfolk
John Schulenberg	Fieldman II	410 $\frac{1}{2}$ Omaha, Norfolk
Frank Weber	Fieldman I	Rt. #3, Norfolk
Frank Sleight	Dist. Manager	120 East 8th, No. Platte
Archie Campbell	Fieldman II	Dist. Office, No. Platte
Wayne Johnston	Fieldman I	115 East 8th, No. Platte
Tony Krebsbach	Fieldman I	802 East 6th, No. Platte
Walter Widman	Fieldman II	1015 E. 4th, No. Platte
Ira Glasser	Dist. Manager	1822 G St., Lincoln
Calvin O. Sampson	Foreman	3008 Holdrege, Lincoln
Clifford Clark	Fieldman II	3008 Holdrege, Lincoln
Clifford Fringer	Fieldman I	3008 Holdrege, Lincoln
Earl Weaver	Fieldman II	3008 Holdrege, Lincoln
Herbert Bucknell	Foreman II	Fremont, Nebraska

<u>Name</u>	<u>Position Title</u>	<u>Address</u>
FISHERIES DIVISION		
Glen R. Foster,	Supervisor	6511 Francis, Lincoln
Paul Todd	Superintendent	313 Williams, No. Platte
Lloyd Winkleman	Foreman	911 N. Eastman, No. Platte
Victor Matousek	Foreman	208 $\frac{1}{4}$ W. 9th, No. Platte
Jerome Molek	Fieldman I	313 Williams, No. Platte
Emil Nieman	Foreman	316 E. 3rd, No. Platte
George Halsey	Fieldman I	817 So. Pine, No. Platte
Gerald Wehrer	Fieldman II	709 E. 5th, No. Platte
Lee Cook	Fieldman II	204 So. Cottonwood, N. Platte
Henry Bruhn	Fieldman I	402 So. Chestnut, N. Platte
Bob Lewis	Fieldman II	709 E. 5th, No. Platte
Earl Gibbs	Fieldman II	709 E. 5th, No. Platte
Bernard Bollish	Fieldman II	Wellfleet
Duane Johnson	Fieldman II	502 E. 5th, No. Platte
Charles Koester	Fieldman II	Wellfleet
Gerhard Lenz	Superintendent I	Gretna
John Deloske	Fieldman I	Gretna
Jerome Wichita	Fieldman II	Gretna
Jim Gray	Superintendent	Valentine
Gilbert Dell	Fieldman I	Valentine
Jack Edwin Morgan	Fieldman II	Valentine
H. C. Howard	Superintendent I	Rt. #4, No. Platte
Victor Forney	Fieldman I	719 West F, No. Platte
Harold Worrell	Fieldman II	403 E. 12th, No. Platte
William Rhodes	Foreman	Exp. Sta., No. Platte
Cecil Beauchamp	Fieldman II	Box 63, Hershey
Frank Weiss	Superintendent I	Star Rt., Benkelman
Raymond Lawson	Fieldman I	Box 27, Benkelman
Charles Blank	Foreman	Parks, Nebr.
Elvin Bray	Fieldman I	Parks, Nebr.
Gerald Plucker	Fieldman I	Parks, Nebr.
Walter Kiener	Dist. Manager	1242 Pawnee, Lincoln
Elmer Carlson	Dist. Manager	201 E. Pasewalk, Norfolk
Orty E. Orr	Dist. Manager	Rt. #2, No. Platte
Bruce McCarraher	Dist. Manager	Box 344, Bassett
John R. Heaton	Dist. Manager	819 Cheyenne, Alliance

GAME DIVISION

Lloyd P. Vance	Supervisor	3946 Everett, Lincoln
S. E. Ling (Deceased Jan. 1955)	Superintendent I	Norfolk, Nebr.
Orden Allen	Foreman I	Rt. #2, Norfolk
John Stephen	Foreman	Wilcox, Nebr.
Harold Miner	Trapper	Wakefield, Nebr.
Henry Sather	Project Leader	247 Witherbee, Lincoln
George Schildman	Dist. Manager	3750 N St., Lincoln
Harvey Miller	Dist. Manager	Bassett, Nebr.
Stanley Smith	Dist. Manager	703 E. 9th, Alliance
Daniel Heyl	Dist. Manager	615 $\frac{1}{2}$ So. Oak, No. Platte
Philip Agee	Research Specialist	Geneva, Nebr.
Max Hamilton	Research Specialist	Box 274, Harvard, Nebr.

<u>Name</u>	<u>Position Title</u>	<u>Address</u>
LAND MANAGEMENT DIVISION		
Jack Strain	Supervisor	2339 No.64th, Lincoln
Edward M. Cassell	Superintendent I	McCook, Nebr.
Melvin Grim	Foreman	McCook, Nebr.
Oakley Porter	Fieldman II	McCook, Nebr.
Jack Stuart	Foreman II	Central City, Nebr.
Wade Hamor	Project Leader	Crete, Nebr.
Charles V. Bohart	District Mgr.	Elms Court, No. Platte
William J. Bailey	District Mgr.	Box 472, Norfolk
Kenneth L. Johnson	District Manager	Box 439, Bassett
Clarence Newton	District Manager	2929 R St., Lincoln
Charles Keeler	District Manager	Alliance, Nebr.
Grant McNeel	Superintendent I	Nebraska City, Nebr.
Richard McNeel	Fieldman I	Nebraska City, Nebr.
L. M. Snodgrass	Superintendent I	Chadron, Nebr.
George Markhofer	Foreman	Chadron, Nebr.
Irene Goff	Fieldman II	Chadron, Nebr.
Marion E. Wallace	Fieldman II	Chadron, Nebr.
H. E. Jones	Superintendent II	Anselmo, Nebr.
William Burton	Fieldman II	Anselmo, Nebr.
John J. Tooley	Superintendent II	Grand Island, Nebr.
Paul Meyer	Superintendent I	Niobrara, Nebr.
Leo C. Peters	Fieldman II	Niobrara, Nebr.
Dallas Johnson	Superintendent I	Ponca, Nebr.
Jerome Bauman	Foreman	Ponca, Nebr.

LAW ENFORCEMENT

William R. Cunningham	Supervisor	501 Mulder Dr., Lincoln
Edward Bosak	District Officer	1019 Grand Ave., Alliance
A. G. McCarroll	District Officer	Box 269, Long Pine
Robert Benson	District Officer	1322 Hayes, Norfolk
Samuel Grasmick	District Officer	1012 East D., No. Platte
William J. Ahern	Conservation Officer	Box 85, Ord, Nebr.
William F. Bonsall	Conservation Officer	Box 305, Alma, Nebr.
H. Lee Bowers	Conservation Officer	Benkelman, Nebr.
Loron Bunney	Conservation Officer	Box 675, Ogallala, Nebr.
M.L. Burney	Conservation Officer	Box 76, Neligh, Nebr.
Leon J. Cunningham	Conservation Officer	Crawford, Nebr.
John Donald Green	Conservation Officer	Box 273, Hartington
Carl Gettmann	Conservation Officer	810 E. 5th, Hastings, Nebr.
Edmund Greving	Conservation Officer	Box 221, Rushville, Nebr.
H. Burman Guyer	Conservation Officer	Lexington, Nebr.
John Harpham	Conservation Officer	Valentine, Nebr.
Harland Huppert	Conservation Officer	Falls City, Nebr.
Norbert J. Kampsnyder	Conservation Officer	Grand Island, Nebr.
Jim McCole	Conservation Officer	Gering, Nebr.
Gust Junior Nun	Conservation Officer	So. Sioux City, Nebr.
Roy Owen	Conservation Officer	Box 288, Crete, Nebr.
Bernard L. Patton	Conservation Officer	Lincoln, Nebr.
Fred R. Salak	Conservation Officer	O'Neill, Nebr.

<u>Name</u>	<u>Position Title</u>	<u>Address</u>
Herman O. Schmidt, Jr.	Conservation Officer	McCook, Nebr.
C. W. "Bud" Shaffer	Conservation Officer	Box 202, Columbus, Nebr.
Joseph P. Ulrich	Conservation Officer	Bridgeport, Nebr.
Ralph Von Dane	Conservation Officer	1443 So. 21, Lincoln, Nebr.
Richard Wolkow	Conservation Officer	2586 Ida St., Omaha
Vernon B. Woodgate	Conservation Officer	Box 403, Fremont, Nebr.

INFORMATION-EDUCATION DIVISION

Wallace F. Green	Supervisor	1121 So. 10th, Lincoln
C. G. Pritchard	Artist Preparator	2535 T St., Lincoln

OFFICE

Ruth Bassett	Clerk IV	Lincoln, Nebr.
Lucille Brazil	Steno.-Clk. III	Lincoln, Nebr.
Carol Broer	Steno.-Clk. III	Lincoln, Nebr.
Jean M. Clark	Steno.-Clk. III	Lincoln, Nebr.
Lorraine Dunlap	Steno.-Clk. III	Lincoln, Nebr.
Marjorie French	Steno.-Clk. III	Lincoln, Nebraska
Carol Glenn	Accounting Clerk	Lincoln, Nebr.
Joy Gould	Steno.-Clk. III	Lincoln, Nebr.
Virginia Heiman	Steno.-Clk. III	Lincoln, Nebr.
Janice Koch	Accounting Clerk	Lincoln, Nebr.
Marian Lanning	Clerk IV	Lincoln, Nebr.
Louise Lucas	Clerk IV	Lincoln, Nebr.
Leota Ostermeier	Steno.-Clk. II	Lincoln, Nebr.
Ella Nora Wallace	Clerk IV	Lincoln, Nebr.
Lila A. Morley	Steno.-Clk. III	Alliance, Nebr.
Dorothy A. Runte	Steno.-Clk. I	Bassett, Nebr.
Joan J. Damme	Steno.-Clk. III	Norfolk, Nebr.
Iva Lou Stoulp	Steno.-Clk. III	North Platte, Nebr.

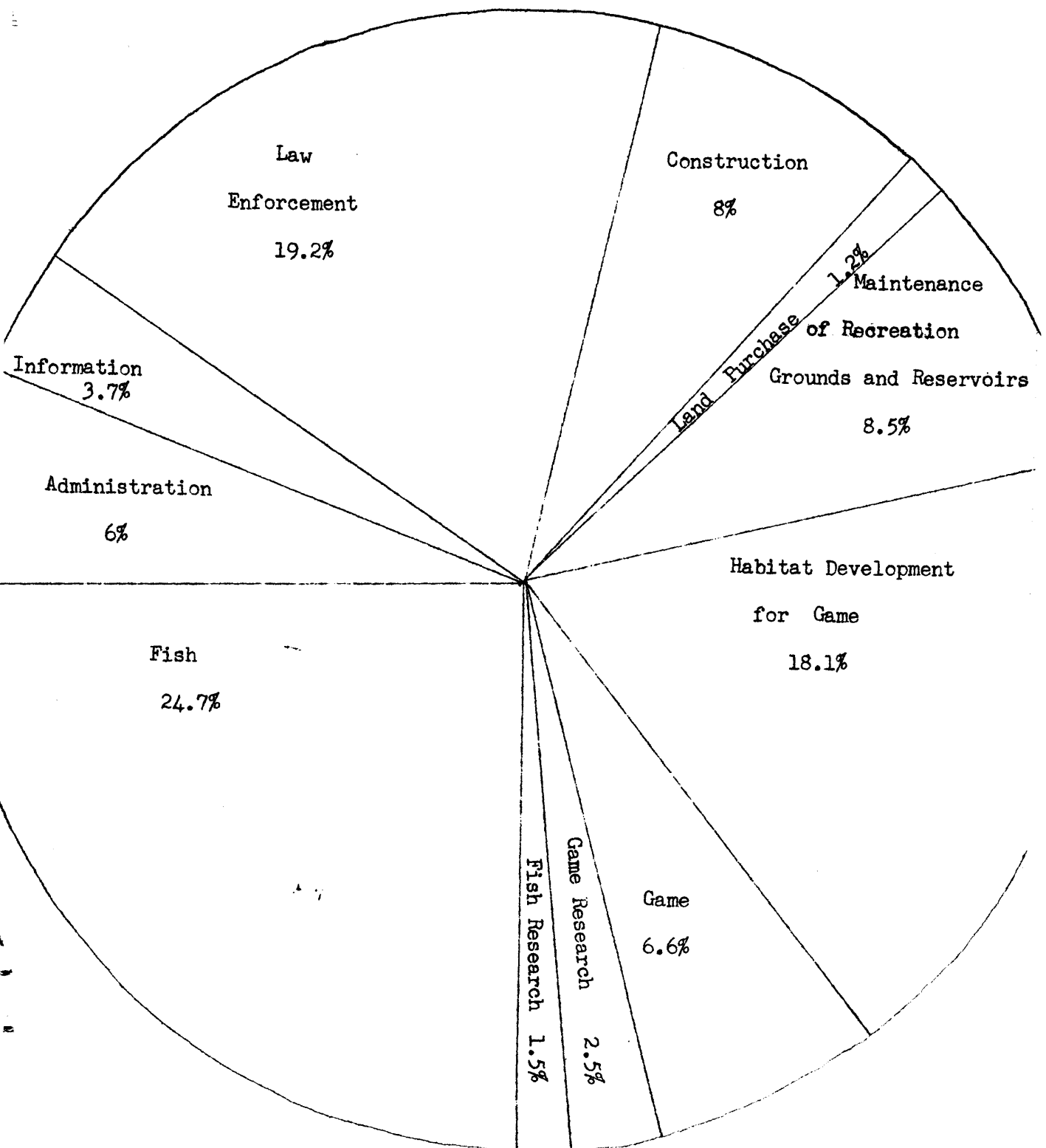
SPECIAL INCOME SOURCES

Niobrara State Park	\$ 4,812.85
Ponca State Park	1,511.75
Ft. Kearney State Park	-----
Arbor Lodge State Park	3,962.15
Chadron State Park	8,736.39
Stolley State Park	79.81
Victoria Springs State Park	17.59
Resident license to fish	171,746.93
Resident license to hunt	120,304.56
Resident license to fish and hunt	241,300.56
Non-resident license to hunt	44,709.80
Non-resident license to fish	31,601.50
Ten-day license to fish (non-resident)	20,808.55
Alien license to fish	40.00
Resident license to trap	11,096.50
Non-resident license to trap	200.00
Game Farm permit	1,133.00
Beaver (nuisance only)	145.00
Bait Vendors	622.50
Seining vendor (Missouri River)	4,900.00
Resident fur buyers license	750.00
Non-resident fur buyers license	150.00
Private fish hatchery license	220.00
Pittman-Robertson refunds (Federal)	252,215.85
Sale - food fish	3,149.25
Propagation fish	25.20
Confiscation	2,406.00
Liquidated Damages	6,660.00
Beaver Seals	8,774.00
House Rents	-----
Leases	35,435.28
Pressey Recreation Grounds	-----
Refunds	-----
Norfolk Game Farm	1,209.35
Outdoor Nebraska	6,255.73
Camp Hayes	-----
Wildcat Hills	-----
Cottonmill Lake	-----
Rock Creek Hatchery	-----
Lost Permits	152.25
Gretna Hatchery	-----
Delinquent accounts	71.50
Shipping Orders	1,305.58
Boat permits	240.00
Sale cars and trucks	18,644.24
Miscellaneous	298.37
Sale Scrap Material	281.65
Delinquent accounts closed out	-----
Sale buffalo and venison	1,099.27
Insurance claim	-----
Deer permits	45,270.00
Fur sale	1,933.85
Beaver permits	4,057.50
TOTAL	\$1,058,334.31

EXPENDITURE SUMMARIZATION

Office	\$57,223.87	
Information	34,157.02	
Commission	2,716.96	
Law Enforcement	189,759.16	
Fisheries Administration	\$11,150.16	
Fish Purchase	25.00	
Fish Research	7,488.34	
Salvage and Distribution	67,170.49	
Gretna Fish Hatchery	13,452.10	
Valentine Fish Hatchery	14,339.41	
North Platte Fish Hatchery	26,114.94	
Rock Creek Fish Hatchery	34,680.16	
Total Fisheries		174,420.60
Construction-Engineering Adm.	18,507.94	
Construction-Engineering Crews	70,884.90	
Supply Depot	6,380.93	
Revolving Fund (Inventory Increase)	1,592.33	
Total Construction-Engineering		98,789.78
Game Administration	67,312.86	
Norfolk Game Farm	39,032.65	
Sacramento Game Farm	11,748.02	
State Trapper	5,123.95	
Total Game		67,312.86
Land Management Administration	13,105.27	
Land Management Crews	24,773.73	
Reservoir Management	21,094.38	
Total Land Management	58,973.38	
Pittman-Robertson Coordination	1,694.68	
Pittman-Robertson Game Mgt. Agents	28,764.00	
P-R Land Management Agents	148,490.49	
P-R Hungarian Partridge	973.03	
P-R Sacramento Development	13,364.21	
P-R Grove Lake Fencing	90.13	
P-R Memphis Duck Marsh Land Acquisition	50.00	
P-R Memphis Lake Duck Marsh Development	3,867.11	
P-R Maintenance of Statewide Fencing	5,250.11	
P-R Pheasant Research	4,689.53	
Dingell-Johnson Coordination	483.73	
D-J Grove Lake Dam Construction	41,017.90	
D-J Grove Lake Development	4,190.68	
D-J Fish Management Agents	18,650.93	
Total Federal Projects		271,526.53
TOTAL ALL DIVISIONS		954,930.16
Arbor Lodge	15,755.90	
Chadron State Park	45,052.61	
Victoria Springs State Park	21,260.69	
Stolley State Park	8,322.20	
Niobrara State Park	27,714.96	
Ft. Kearney State Park	9.00	
Ponca State Park	17,138.66	
Total State Parks		135,254.02
GRAND TOTAL		\$1,090,184.18

Total Expenditure 1953-54 Fiscal Year: \$1,063,027.89.



PERMITS ISSUED BY COUNTIES

1953

County	Fish	Hunt	F.& H.	N.R. Hunt	N.R. Fish	N.R.F. 10-Day	Trap	Beaver	Total
Adams	2587	2432	2444	108	7	51	33	5	7667
Antelope	1075	504	1015	16	2	32	50	17	2711
Arthur	68	33	64	2	4	11	8		190
Banner	20	31	36	2	3	2	4		98
Blaine	129	62	194	7		14	21	7	434
Boone	550	722	579	17	1	9	25	9	1912
Box Butte	1412	1075	1268	46	5	98	56	1	3961
Boyd	411	279	371		3	8	19	9	1100
Brown	773	435	782	18	14	79	58	10	2169
Buffalo	2287	1871	2563	101	3	82	61	38	7006
Burt	708	598	662	12	2	3	167	7	2159
Butler	697	603	936	3		12	51	5	2307
Cass	1300	1143	1213	27	5	10	110	13	3821
Cedar	480	932	515	31	1	1	74	13	2047
Chase	1046	451	1086	69	197	330	34	14	3227
Cherry	1082	424	1038	19	24	120	75	22	2804
Cheyenne	1620	1274	1166	53	17	57	8		4195
Clay	586	802	918	60	1	19	14	2	2402
Colfax	818	822	1048	18	1	15	80	16	2818
Cuming	882	609	894	11	1	12	137	16	2562
Custer	1216	1740	1834	87	4	74	29	8	4992
Dakota	866	1089	553	278	25	38	40	2	2891
Dawes	1112	655	836	18	12	57	28	14	2732
Dawson	2110	1929	2247	64	10	206	99	48	6714
Deuel	490	300	415	28	114	124	8	5	1484
Dixon	323	507	397	13		1	46	5	1292
Dodge	3349	2188	2486	42	3	76	229	48	8421
Douglas	18350	16101	11728	364	40	116	110	16	46825
Dundy	447	294	566	90	439	294	9	6	2145
Fillmore	552	805	983	74		16	21	3	2454
Franklin	422	460	660	70	9	32	9	3	1665
Frontier	450	263	545	24	6	25	17	9	1339
Furnas	1151	854	1391	120	35	185	76	10	3822
Gage	1783	2001	1933	104	8	44	111	8	5992
Garden	663	327	587	60	106	299	20	8	2070
Garfield	314	196	423	4	5	30	84	12	1068
Gosper	333	127	313	17	29	210	4	1	1034
Grant	197	88	168	6		12	15		486
Greeley	294	405	351	24	1	13	10	7	1105
Hall	3100	3038	3258	124	1	50	48	9	9628
Hamilton	396	573	488	23	1	15	17	2	1515
Harlan	432	537	559	120	40	145	16	4	1853
Hayes	115	126	137			1	4	4	387
Hitchcock	536	479	626	40	66	96	13	1	1857
Holt	1629	847	1623	12	7	71	203	39	4431
Hooker	158	54	227	8		15	6		468
Howard	602	452	648	14	1	13	43	1	1774
Jefferson	1005	985	1127	59	16	47	62	5	3306
Johnson	405	409	602	8		3	78	3	1508

PERMITS ISSUED BY COUNTIES

1953

(Continued)

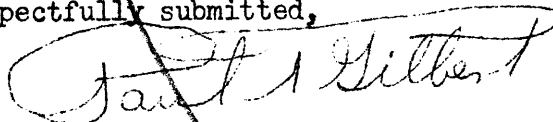
County	Fish	Hunt	F.& H.	N.R. Hunt	N.R. Fish	N.R.F. 10-Day	Trap	Beaver	Total
Kearney	350	567	545	42	1	12	2	1	1520
Keith	1553	768	1436	47	246	1153	37	18	5258
Keya Paha	130	56	146	3	4	1	3	1	344
Kimball	586	291	404	45	109	44	10		1489
Knox	1099	854	1064	18	4	14	70	15	3138
Lancaster	9507	8097	7068	320	29	83	146	19	25269
Lincoln	3571	2442	3292	73	36	279	115	20	9828
Logan	84	95	130	2		16	17	1	345
Loup	62	57	112	1		5	4	2	243
McPherson	50	33	50			2	1		136
Madison	2241	1797	2136	45	7	34	92	16	6368
Merrick	579	643	939	33	2	16	52	21	2285
Morrill	927	664	623	37	12	52	44	17	2376
Nance	375	410	521	4		13	33	9	1365
Nemaha	857	614	770	24		6	88	5	2365
Nuckolls	514	830	635	109	10	27	26	10	2161
Otoe	968	1166	1217	45	1	1	136	9	3543
Pawnee	420	263	470	20	3	19	32	4	1231
Perkins	339	346	517	27	18	26			1273
Phelps	711	782	944	82	5	68	6	2	2600
Pierce	708	514	790	12	3	8	59	10	2104
Platte	1362	1214	1897	27	4	34	25	23	4586
Polk	467	334	690	8	1	11	11	1	1523
Red Willow	1581	1243	1518	114	167	323	24	13	4983
Richardson	1522	920	1514	178	216	69	141	8	4568
Rock	407	247	340	9	2	32	110	11	1158
Saline	1136	992	1817	21	2	31	80	7	4086
Sarpy	526	689	501	5	1	11	26	3	1762
Saunders	1333	1132	1388	11		9	195	23	4091
Scotts Bluff	3115	2559	2445	136	96	110	98	12	8571
Seward	1110	1171	1346	33	9	29	84	5	3787
Sheridan	865	756	941	21	12	60	50	7	2712
Sherman	377	454	504	30	1	9	23	10	1408
Sioux	91	37	118	4	26	12	8	3	299
Stanton	371	254	450	3		6	36	6	1126
Thayer	592	721	925	165	5	22	33	4	2467
Thomas	179	138	213	10	1	11	12	3	567
Thurston	386	349	293	2	2	6	55	5	1098
Valley	568	598	739	21	3	34	28	15	2006
Washington	586	703	663	30	1	5	78	6	2072
Wayne	350	488	446	18		2	27	4	1335
Webster	568	413	564	108	14	39	20	4	1730
Wheeler	173	83	219			14	25	4	518
York	929	936	1109	34	1	11	33	3	3056
Colorado				46	384	35			
Iowa				577	9	6			
Kansas				181	335	144			
Alien Fish (Scotts Bluff)									
TOTALS	105556	90652	100953	5296	3051	6227	4735	845	317316

CONCLUSION

The past year has been an unusual series of events and problems for the Nebraska Game, Forestation and Parks Commission. The reduced pheasant population and weather conditions during the duck season measurably reduced the Commission's annual income. The Commission, however, anticipated such a possible decrease and maintained a working balance which permitted full production and improvements in the Department under difficult conditions.

It is anticipated that the coming year will reflect a forward step in game and fish management through the progressive steps taken by the Commission this past year.

Respectfully submitted,

A handwritten signature in cursive script, appearing to read "Paul T. Gilbert", written over a horizontal line.

Paul T. Gilbert
Executive Secretary
Game, Forestation and Parks Commission